



2024 ABLE Higher Degree by Research Conference 10 April 2024 National Wine Centre



# Broughton and Ferguson Session 1

# Climate, Disaster and Complexity

Chair: Navodi Wijayarathne

**Room coordinator: Dr John Tibby** 







### Yuan Chai (Rica) Adelaide Business School

Systems Review:

Systems Thinking in Disaster
Response



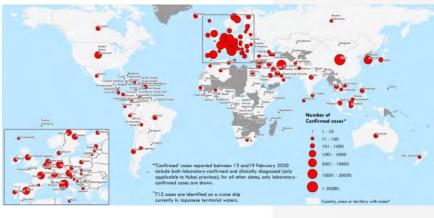
### Background

- Disaster response is already a global issue
- Existing framework National Disaster Framework (NDF) &

**Emergency Management (EM)** 

- Systems thinking
- Disaster response framework
- Quick guidance, improve response efficiency, stabilise the lifeline









National Response Framework

October 28, 2019





### Methodology

Establish a complex disaster response system that would minimize the impact of disasters on a society and its citizens.

- Case Study
- Qualitative Method
- System Dynamic
- Survey & Interview



### Result

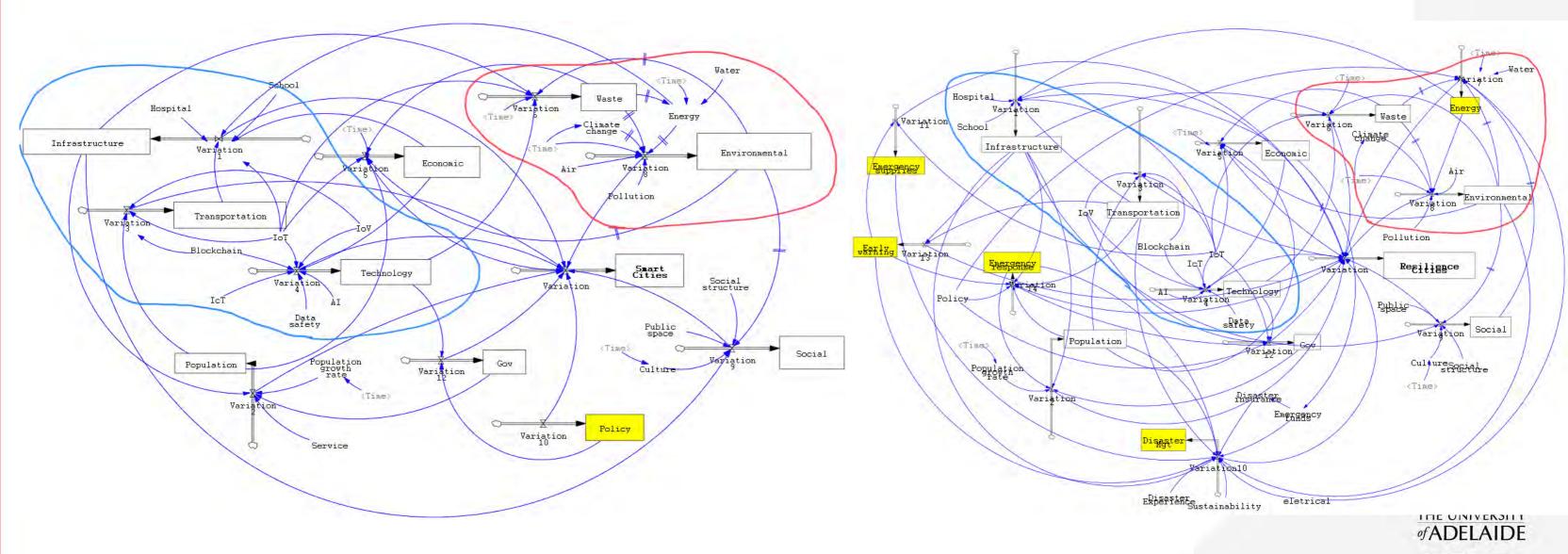


Fig. 1. Stock-and-Flow model of Smart Cities

Fig. 2. Stock-and-Flow model of Resilient Cities



### Conclusion

- Result:
- Complex systems can provide ideas for disaster response
- Impact:
- National security, Social stability in development
- Lives of citizens & Stable development (economic & resource)
- Gaps in the Complex Systems Framework for Disaster Response

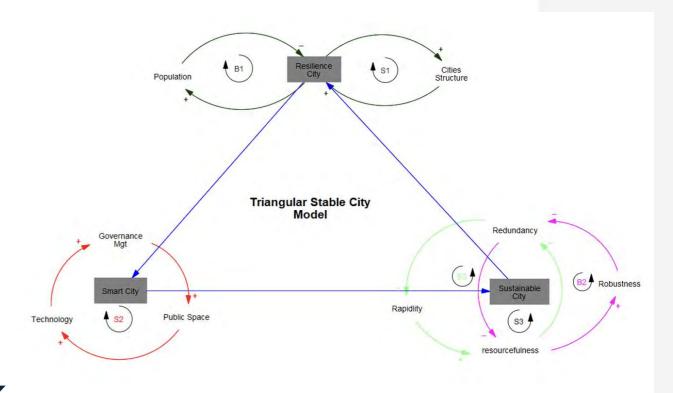


Fig. 3. Triangular Stable City Model





# Tadiwos Tiruneh School of Economics and Public Policy

Climate variability and the adoption of Climate-Smart Agricultural practices in Ethiopia: Insights from a temporal and geospatial analysis

### **Overview**

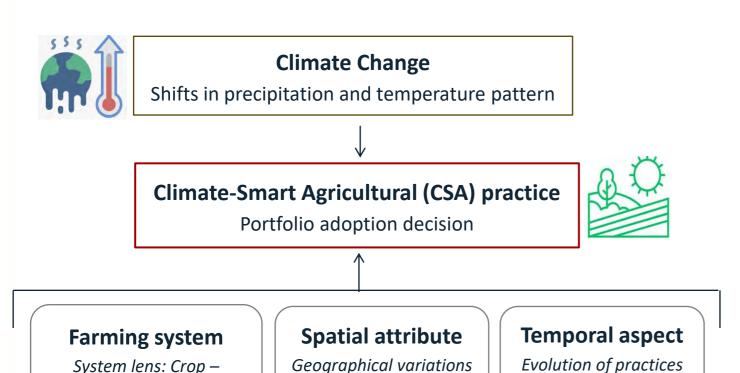


Figure 1: Conceptual framework representing linkages between climate change and CSA adoption (source: author's formulation)

on practice applicability

over time

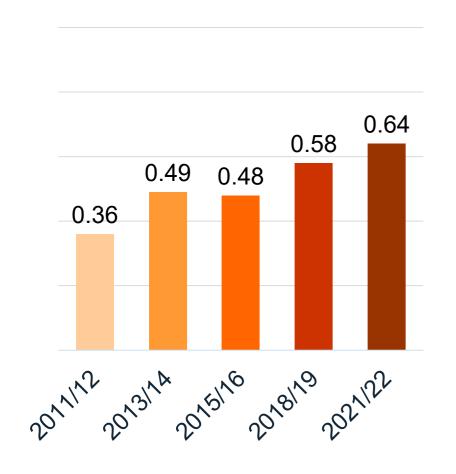
livestock; mixed practices

- Climate-smart agriculture (CSA) as a holistic solution for adaptation and resilience (FAO, 2010)
- CSA encompasses a variety of agricultural techniques and methods.
- Yet, many analyses overlook the comprehensive nature of CSA by focusing solely on individual practices.
- Our study examined the **temporal** and **spatial trends** in CSA adoption among farmers; in relation to climate variability.
- Analysed rural Ethiopian household surveys from five periods:
   2011/12 to 2021/22, and combined with historical climate data
- We used a **CSA portfolio index** to measure the adoption of integrated CSAs, common in mixed farming systems

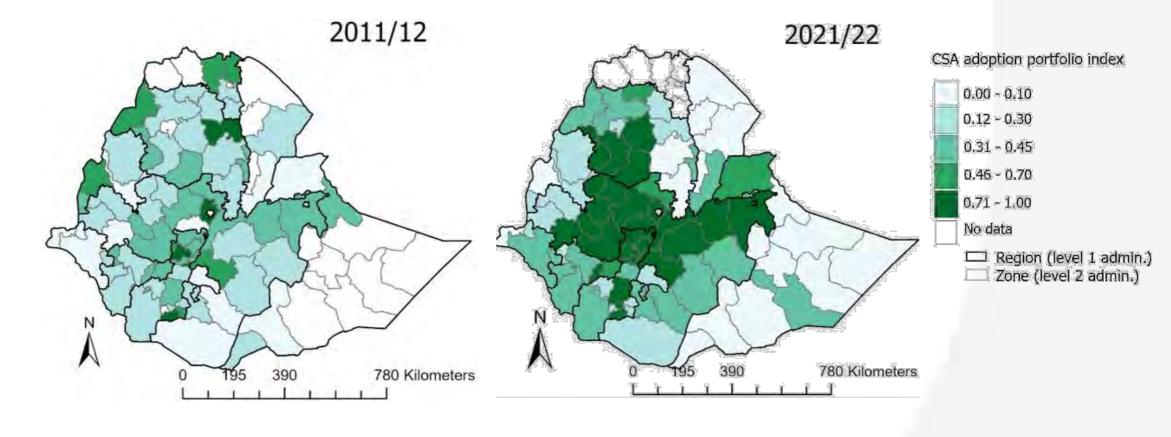
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### Results

CSA practices adoption: temporal and spatial distribution of adoption portfolio index



CSA adoption portfolio index in Ethiopia

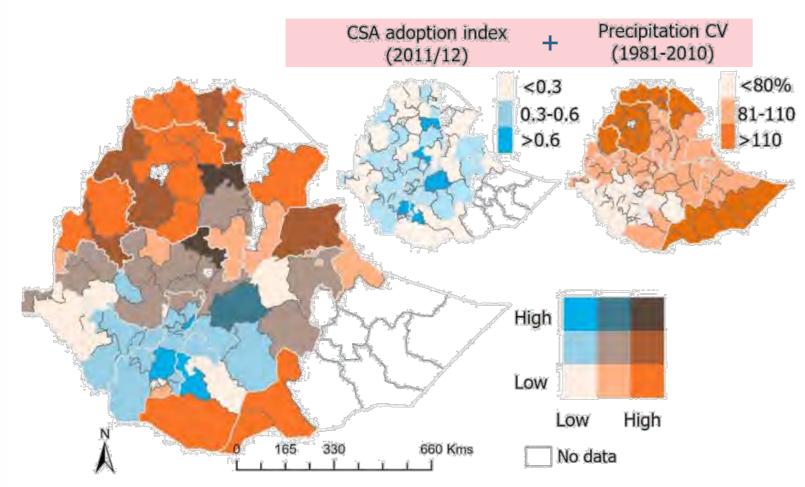


- A notable geographic disparities has observed, indicating the need for targeted interventions.
- Over the years, adoption trending towards greater overall uptake
- Peripheral regions have shown a more gradual increase in adoption



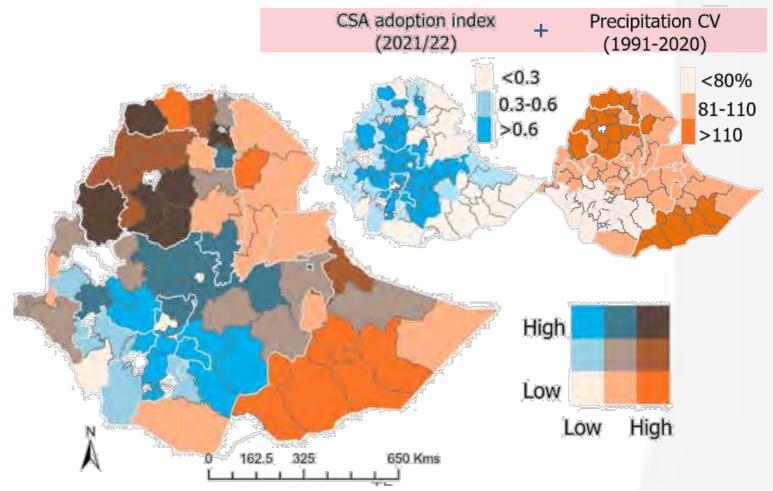
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#### CSA adoption vs. climate change





- Shows areas of resilience and those in need of support
- Reflects some challenges in implementing CSA practices.



- Increased CSA adoption in previously low-adoption areas.
- Over the decade, observed a darker colours, indicating a high CSA portfolio index amidst high precipitation variability
- Showing a shift toward more resilient practices
- Suggested a need for localized, adaptable CSA strategies over one-size-fits-all solutions

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### Conclusion



Adoption uptrend: CSA portfolio index indicates (an overall and by regions) positive trend from 2011/12 to 2021/22



Geographical variability: Spatial analysis reveals significant regional disparities in CSA adoption, signalling a need for location-specific interventions.



Adapting to climate variability: Bivariate choropleth maps reveal areas of resilience. Although higher CSA adoption is present in areas with greater climate variability, such instances are limited and dispersed, but growing over years



The need for localized, adaptable CSA strategies over one-size-fits-all solutions.

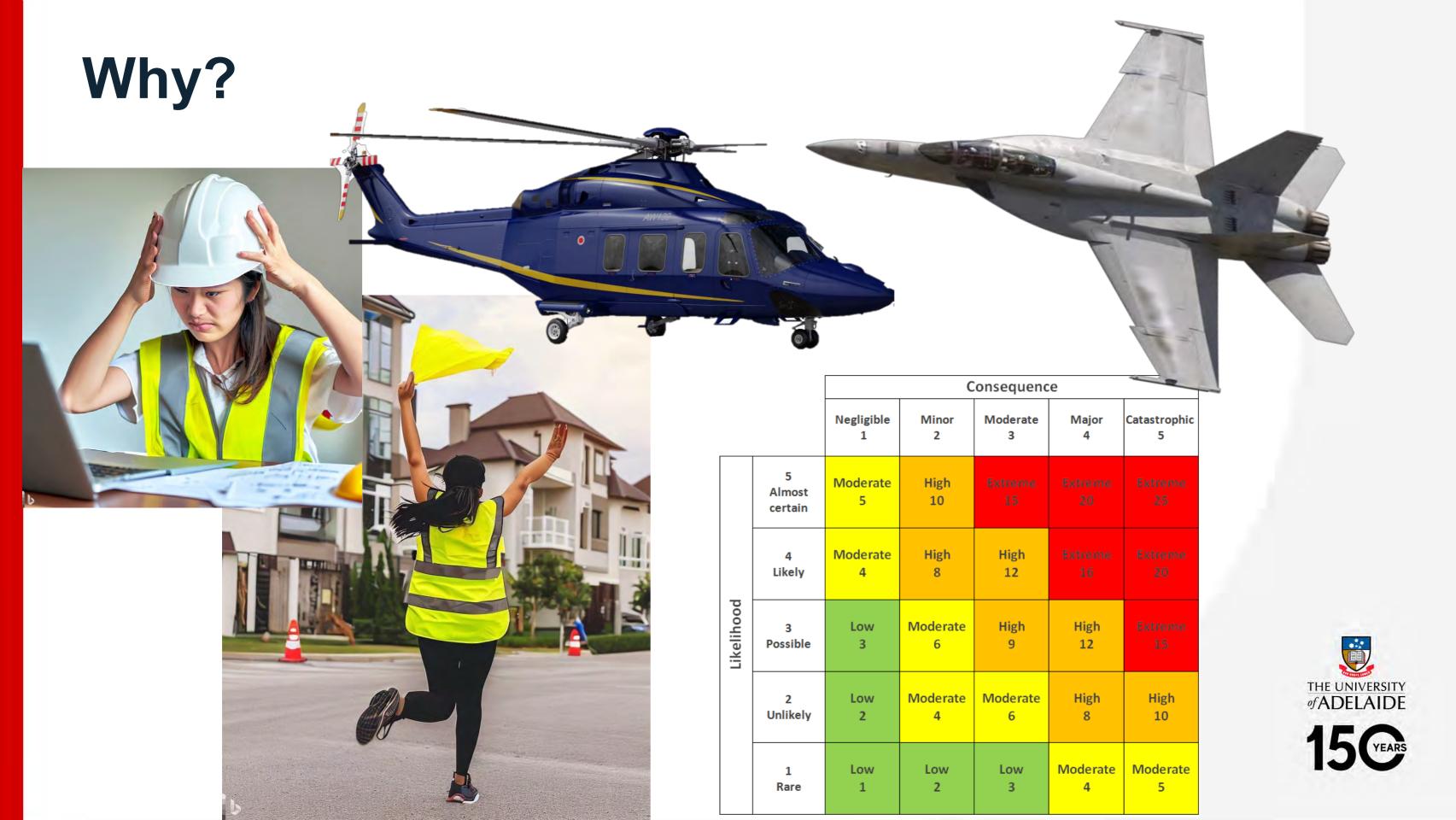




Ben Luther Adelaide Business School

Advancing Management of Risk in Complex Systems



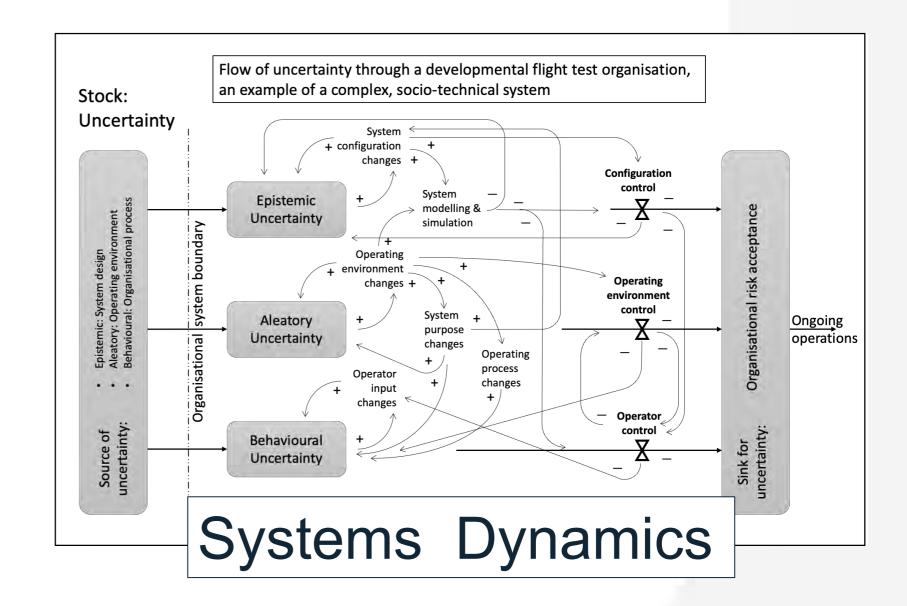


### Research and Findings

### Ethnographic – case study

- Observation
- Survey
- Interview

Empirically
Grounded
Analysis



Flight Test Risk Management

- 1. Unique across 3 domains
- 2. Parallel approaches
- 3. Inefficient but effective





### Risk Theory

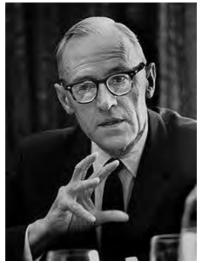
### Extant

### **Evolved**

### **Economic Theory**

### Morgenstern

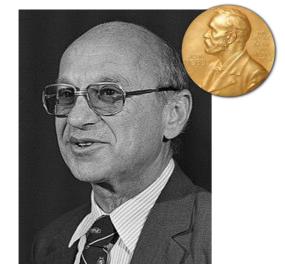




Friedman



von





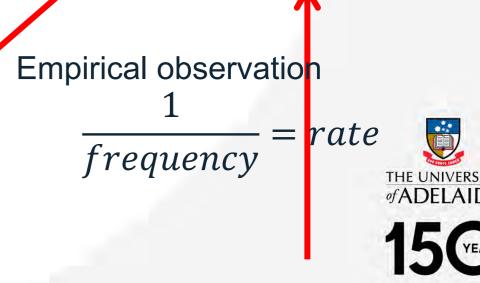
		Consequence				
		Negligible 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Likelihood	5 Almost certain	Moderate 5	High 10			
	4 Likely	Moderate 4	High 8	High 12		
	3 Possible	Low 3	Moderate 6	High 9	High 12	Extreme 15
	2 Unlikely	Low 2	Moderate 4	Moderate 6	High 8	High 10
	1 Rare	Low 1	Low 2	Low 3	Moderate 4	Moderate 5

**Subjective Probability** 

### Safety Science



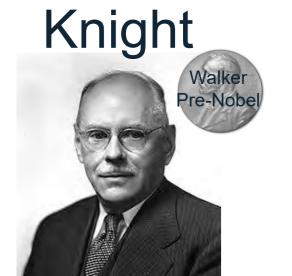
### **Probability**

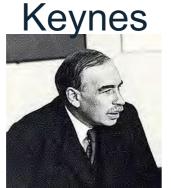




### Risk Theory

### **Evolved**





Dynamism

Unique

#### **COMPLEX**

**©**Enabling constraints Loosely coupled

probe-sense-respond

**EMERGENT PRACTICE** 

### Repetitive

#### **COMPLICATED**

Governing constraints Tightly coupled

sense-analyze-respond

GOOD **PRACTICE** 

**CLEAR** 

Tightly constrained

No degrees of freedom

System Safety

failure reliabilty rate

### **Probability**

Quantitative

#### CHAOTIC

act-sense-respond

**NOVEL PRACTICE** 



Lacking constraint De-coupled



sense-categorize-respond

**BEST PRACTICE** 

Cynefin

**Empirical observation** 

= ratefrequency







Uncertainty

Qualitative







### Amelia McFarlane Social Sciences

Exploring the spaces between topdown and bottom-up Climate Actions



Using South Australia as a case study, how do individual citizens respond to ideas of direct government intervention in collective climate action?



### What if...





Warner Bros./Getty Image

...then why not?



- To challenge concepts of and ideas around 'Climate Actions' and responsibility;
- To contribute qualitative data to existing quantitative indications that citizens wish to 'do' more;
- To suggest braver and more positive ways for policy makers to explore collective climate actions.



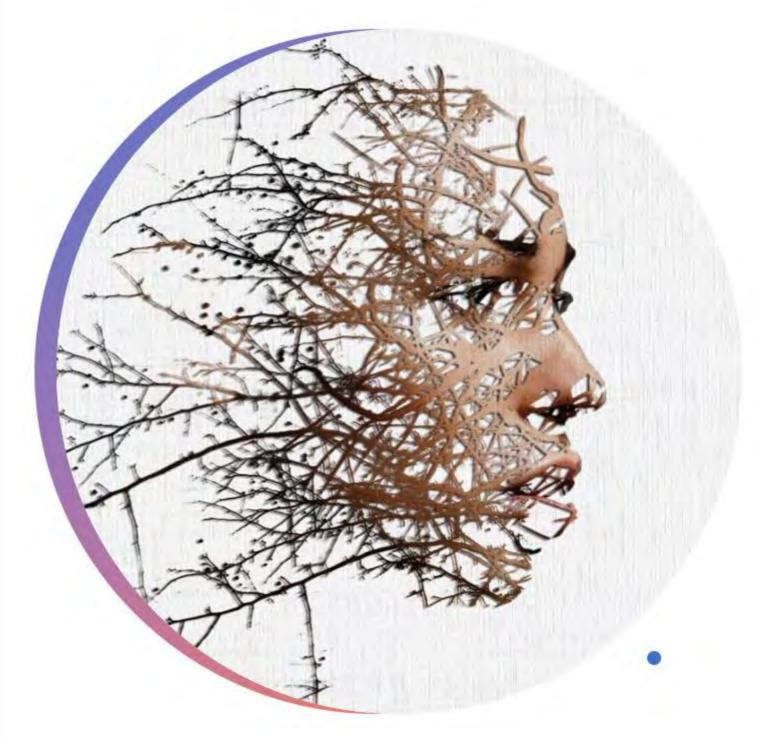


### John Al Khateeb Business School

Embracing Complexity: Redefining Project Management in Complex Realities



### **Decoding Project Complexity**





**Bounded Planning** 



Impact not Solutions



Exceeds Technology Cycle



Uncertainty and Ambiguity



Significant Dynamic Forces



15 CYEARS

### Rethinking Governance in Complex Realities

#### **Research Questions:**

- 1. What are the unique complexities and challenges inherent in governing complex projects, and how do existing frameworks and theories address these complexities
- 2. How can systems thinking provide a holistic governance structure that overcomes the limitations of traditional project governance models in managing the complexities of complex projects:
- 3. How can systems thinking be utilised to develop a comprehensive model for governing complex projects

### Making an Impact in Complex Project Management

#### **Research Impact & Outcomes:**

- 1. Contribute to the evolving body of knowledge in complex project management and systems thinking.
- 2. Deepen understanding of project complexities and characteristics
- 3. Build a Governance Model that is responsive, adaptable and can respond to the needs of complex projects.



### Gulsah Yildirim Kirbaci School of Education

Cultivating Human-Nature Bonds: Are Schools Struggling to Effectively Connect Adolescents with the Natural World?



### The Problem: Alienation from Nature



generated by Al

- Adolescents' nature connection in decline (Bezeljak et al., 2023; Keith et al., 2021; Hughes et al., 2019)
- Fostering nature connectedness is essential
- Schools are critical sites for cultivating connection to nature

Research gap: Effectiveness of environmental education in strengthening nature connections underexplored. (Whitburn et al., 2023; Bezeljak et al., 2023)



#### **Outcomes**

Students' perspectives on

educational experiences

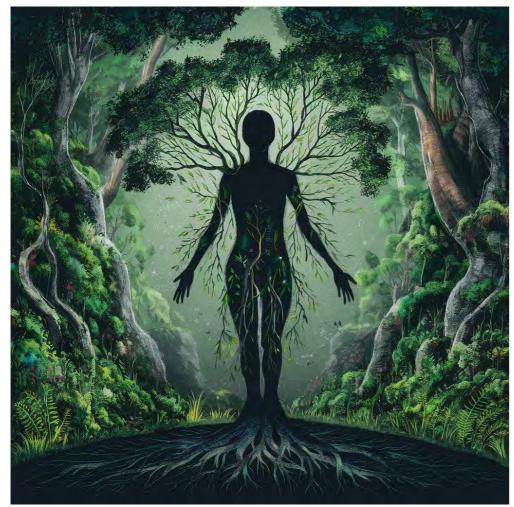
Question **Data collection** Pre-post survey Changes in students' nature connectedness Quantitative Survey component Compare outcomes between To what extent schools with and without explicit do Australian sustainability-focused curricula schools with environmental Mixed methods education research design programs Firsthand understanding of strengthen Classroom educational strategies and students' observations practices connection to nature? Qualitative **Teacher** Insights into curriculum and component pedagogies interviews

Student focus

groups



### **Cultivating Nature Connections**



generated by AI

- Providing evidence-based strategies for fostering adolescents' bond with nature
- Providing insights into schools' role in reconnecting adolescents with nature
- Contribution to the development of an environmentally responsible generation

#### Biophilia Hypothesis

Innate affinity with natural world due to our biological heritage and evolutionary background. (Wilson, 1984)





# Ngoc Lan Tran Social Sciences

Un/forgetting Agent Orange: Towards a Reimagining of Vietnamese Forests



### The politics of Agent Orange

War legacies, scientific uncertainty, moral responsibility

**Vietnamese victims** 

**Chemical companies** 



### Justice for Agent Orange victims

Constraints of scientific & legal discourses



### Interlude

**Un/forgetting Agent Orange** 

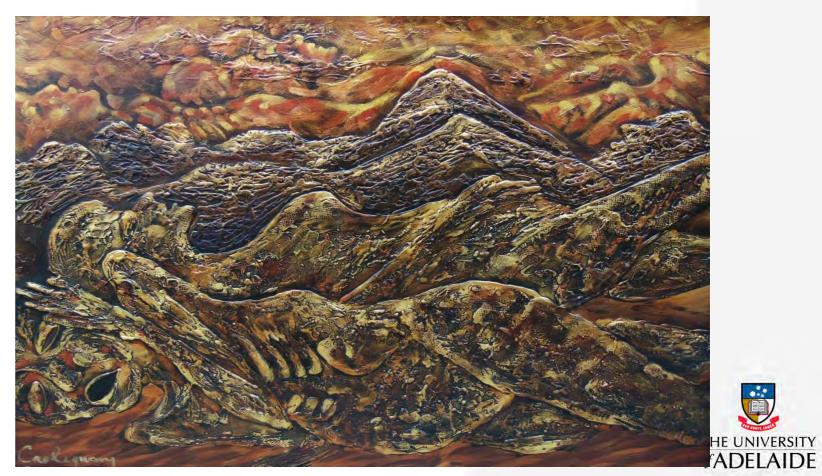


### Life stories

#### **Tran To Nga**



#### Cao Le Quang





## **Trang Huyen Dang Economics and Public Policy**

Is children's mental health affected by exposure to natural disasters?

Evidence from Australia.



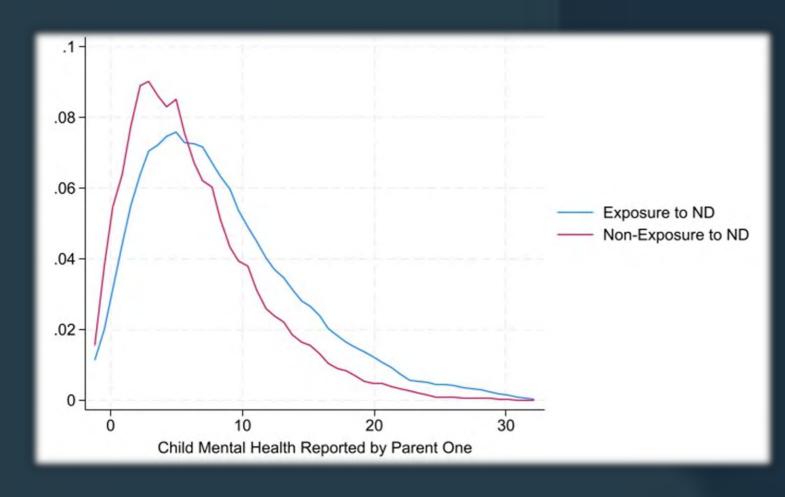
### Motivation

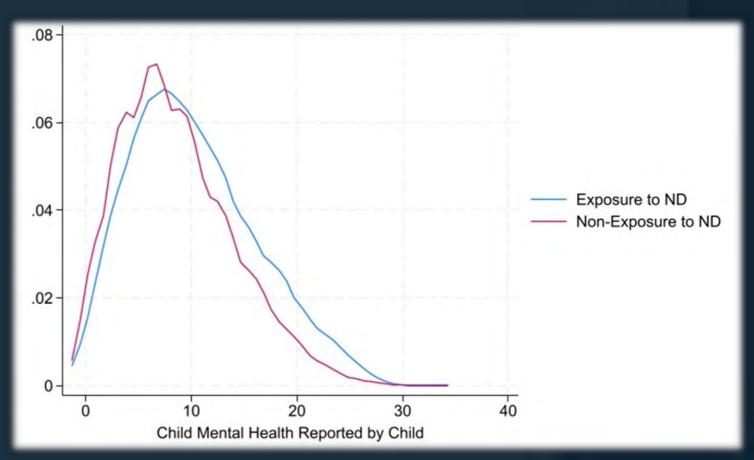
- Children are particularly vulnerable when exposed to natural disasters regarding their physical health, mental health, and learning (Kousy, 2016; Peek, L., 2008).
- Natural disasters are widespread in Australia, impacting its population's physical and mental health (Australian Government, 2018; Reifels, L. et al., 2019).
- Mental health disorders were the third biggest burden in Australia, with a total cost of at least 12.7 million AUD, based on the findings from the 2007 Australian National Survey of Mental Health (Lee et al., 2017).



## **Research Question**

What are the effects of natural disasters on children's mental health?







## Methodology

**1. Data Source**: the Longitudinal Study of Australian Children (LSAC), a comprehensive biennial survey of children and their families across Australia.

2. Estimation Method: Fixed Effects, Quantile Regression with Fixed Effects.

Fixed-effects models estimate outcomes associated with changes in exposure status within individuals

$$MHS_{it} = \beta * Exposure_{it} + \delta * X'_{it} + \mu_i + \mu_s + \mu_t + U_{it}$$

Due to a potential heterogeneity in the effects of natural disasters across the distribution of mental health, we employ panel quantile regressions to investigate the details.

$$Q_{MHS_{it}}(\tau_j|Exposure_{it}, X_{it}) = \beta(\tau_j) *Exposure_{it} + \delta(\tau_j) *X'_{it} + \mu_i(\tau_j) + \mu_s(\tau_j) + \mu_t(\tau_j)$$

### Impact of natural disasters on children's mental health

	0.25 Quantile	0.50 Quantile	0.75 Quantile	0.90 Quantile
Full Sample	0.257*** (0.016)	-0.436** $(0.170)$	0.492*** (0.018)	0.487*** (0.040)
Girl	$0.294*** \\ (0.007)$	0.116*** $(0.012)$	0.243*** (0.015)	0.785*** (0.064)
Boy	-0.006 (0.083)	0.446*** $(0.023)$	0.512*** $(0.019)$	$0.205 \\ (0.265)$
Indigenous	1.058*** $(0.219)$	0.667 $(0.436)$	2.295*** $(0.141)$	3.562*** $(1.208)$
Non-Indigenous	0.183*** $(0.005)$	0.462*** $(0.119)$	-0.568*** (0.041)	0.509*** $(0.015)$
Rural	-0.326*** (0.091)	0.359*** $(0.039)$	-0.034 (0.096)	0.960*** $(0.059)$
Urban	0.251*** $(0.073)$	0.603 $(0.388)$	-0.093 (0.061)	0.392*** $(0.103)$
Low-SEIFA	$0.205** \\ (0.081)$	0.383*** $(0.039)$	$0.162 \\ (0.204)$	0.690*** $(0.031)$
High-SEIFA	0.329*** $(0.087)$	1.061*** $(0.128)$	0.625*** (0.008)	0.744*** $(0.065)$

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1. Robust standard errors in parenthesis. All regressions include the full set of control variables.



### Conclusion

- There is an existence of heterogeneity in the effects of natural disasters across the distribution of children's mental health.
- Among different populations, girls and Indigenous children suffer the most, especially those in the top quantiles.
- Parents are observant about their children's exposure to natural disasters, compared to children.
- Policymakers must address this complexity based on their gender, cultural background, and pre-existing mental health struggles.







# Broughton and Ferguson Session 2 Innovative Strategies

**Chair: Art Cotterell** 

Room coordinator: Dr Kathryn Bowd







## Ardalan Alamdari Business School

Exploring the Role of Emerging Technologies in Combating Modern Slavery in Global Supply Chains: A Systematic Review



## Terminology









## motivation

Emerging technologies

Transparency

Intended and Unintended Consequences

Modern Slavery
Global SCs of
Construction
Megaprojects

#### Literature review components:

- Emerging Technology Role
- Organizational Capability
- Measures and Mechanisms
- Tackling Modern Slavery





## **Expected outcomes**

RQ1- What emerging technologies exert influence on the efforts to address modern slavery within supply chains?

RQ2- In what ways do emerging technologies facilitate the processing of information concerning modern slavery within supply chains?



Contribution to the body of theory and literature



Proposal of a future research agenda



## Limitations and possible improvements

Database limited: Scopus and WoS

Additional search strategies (emerging keywords, specific journals, seminal works)

Grey literature (online news etc.)



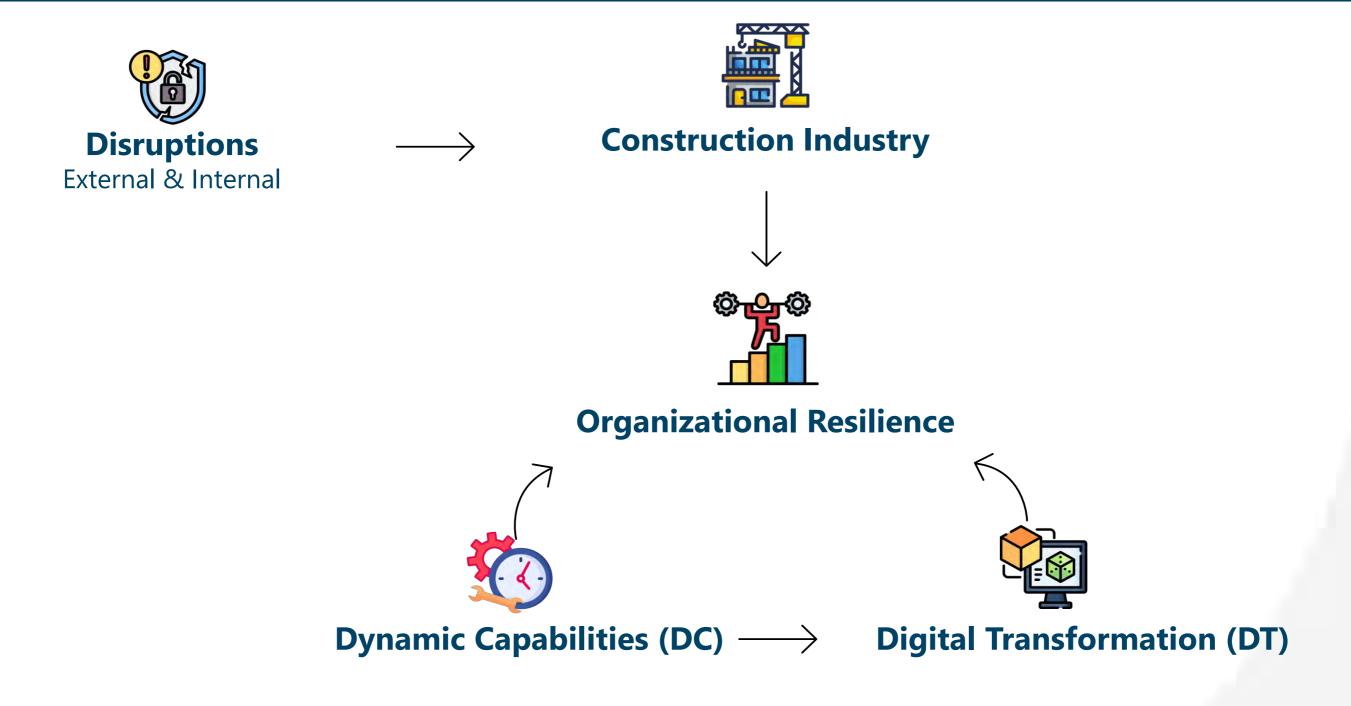


## Navodi Wijayarathne Business School

Building Resilience through Digital Transformation in the Construction Industry- Dynamic Capability View

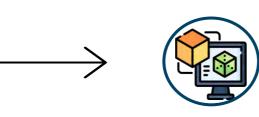


#### Introduction



Aims to explore the interplay between Dynamic Capabilities (DC) and Digital Transformation (DT) in enhancing resilience within the construction industry.





Digital Transformation



- ✓ RQ How digital transformation is enabled through dynamic capabilities in construction?
- ✓ Systematic Literature Review (SLR)
- ✓ Analysis Nvivo
- ✓ Identified 66 papers

- ✓ RQ How is resilience built through digital transformation/ dynamic capabilities in construction?
- √ Face-to-face Semi-Structured
- ✓ Population- Academic/ Industry experts
- ✓ Sample size 5-10

#### Study 3

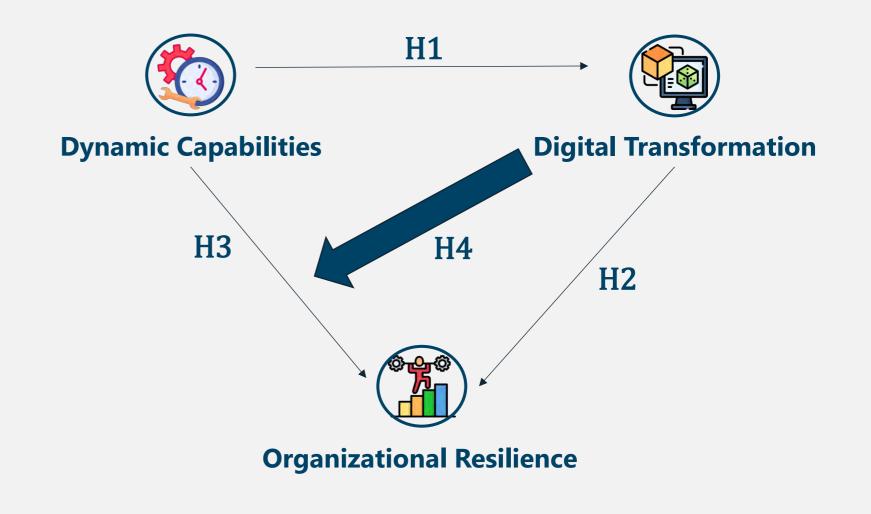
- ✓ RQ How resilient is built through digital transformation and dynamic capabilities in the construction industry?
- ✓ Structural Equation Modelling (SEM / PLS-SEM)
- ✓ Population Industry Experts
- ✓ Sample size 150- 200
- ✓ Online Survey Questionnaire

H1: DC positively impacts DT.

H2: DT positively impacts resilience.

H3: DC positively impacts resilience.

H4: DT mediating the link between DC and resilience.



#### **Anticipated Contributions of the Research**

#### **Academic Contributions:**

- ✓ Understanding the synergy between DC and DT in enhancing construction industry resilience.
- ✓ Explore the temporal dimensions of resilience, expanding the academic discourse.

#### **Industry Contributions:**

- ✓ Provides actionable insights for leveraging DC and DT to bolster resilience against industry disruptions.
- ✓ Offers strategic guidance on effective digital transformation adoption within construction firms.
- ✓ Informs industry practices, aiding in the development of resilient and adaptive business models, influencing policy-making and strategic planning.

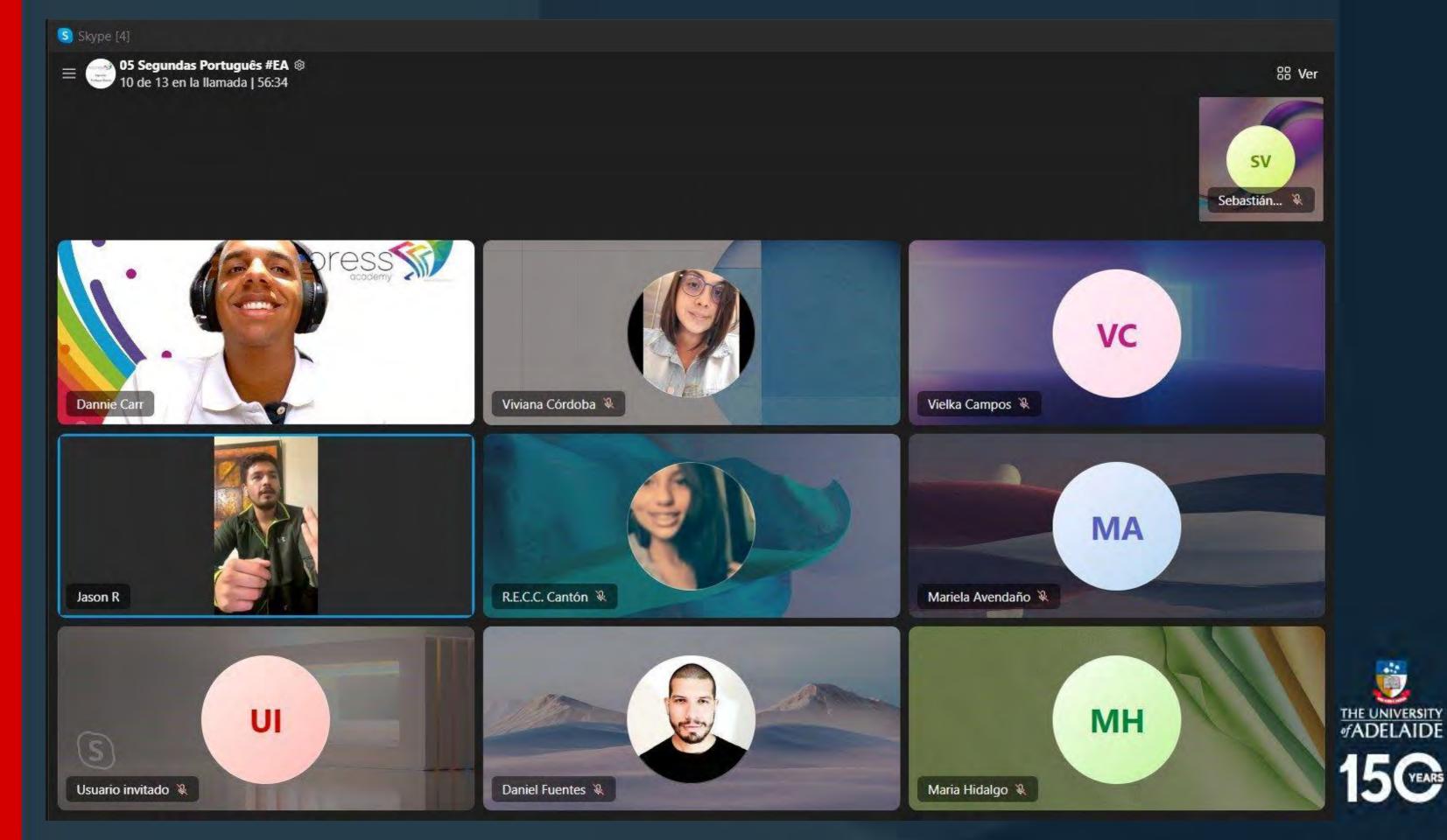




## Dannie Carr Adelaide Business School

Navigating Barriers:
Disruptive Technologies and
Internationalisation Adoption
in Latin American SMEs.

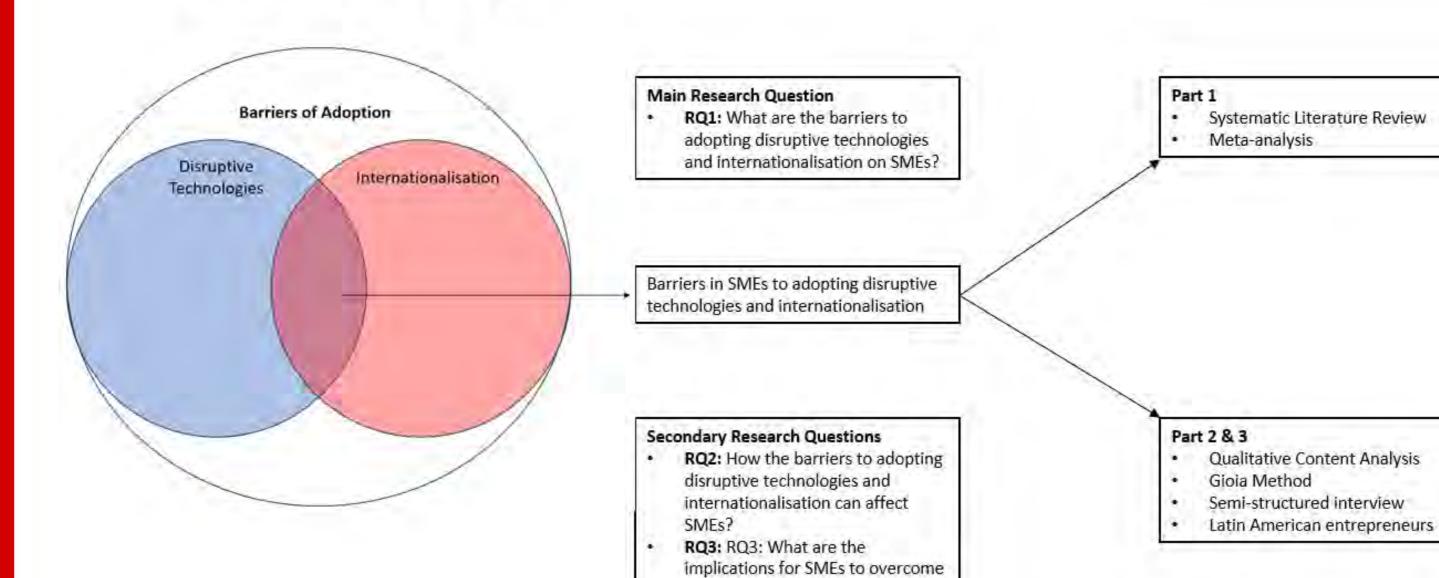








## Overview



these barriers?



## Yinke Qin Business School

The title of the presentation:

Leveraging Al-driven BIM for

Dynamic Project Management in

Construction



## BIM: Building information modeling



BIM: a digital representation of physical and functional characteristics





AI + BIM



**Guide Construction** 

**Prevent Errors** 

**Streamline Process** 





AI + BIM



**Decision support** 

**Optimization** 

Risk management



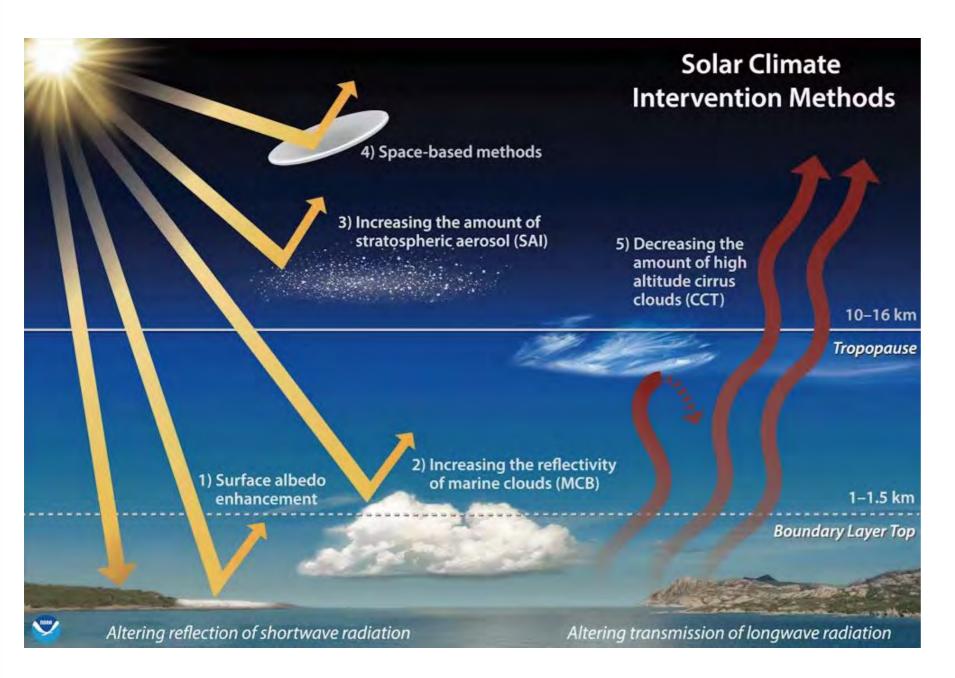


## Rachel Neef Adelaide Law School

Urgent Action Required: Can an Analogy to Space Activities
Accelerate Solar Radiation
Management Governance?



## Solar Radiation Management



- International law is needed to govern transboundary, regional and global risks
- International law is currently insufficient

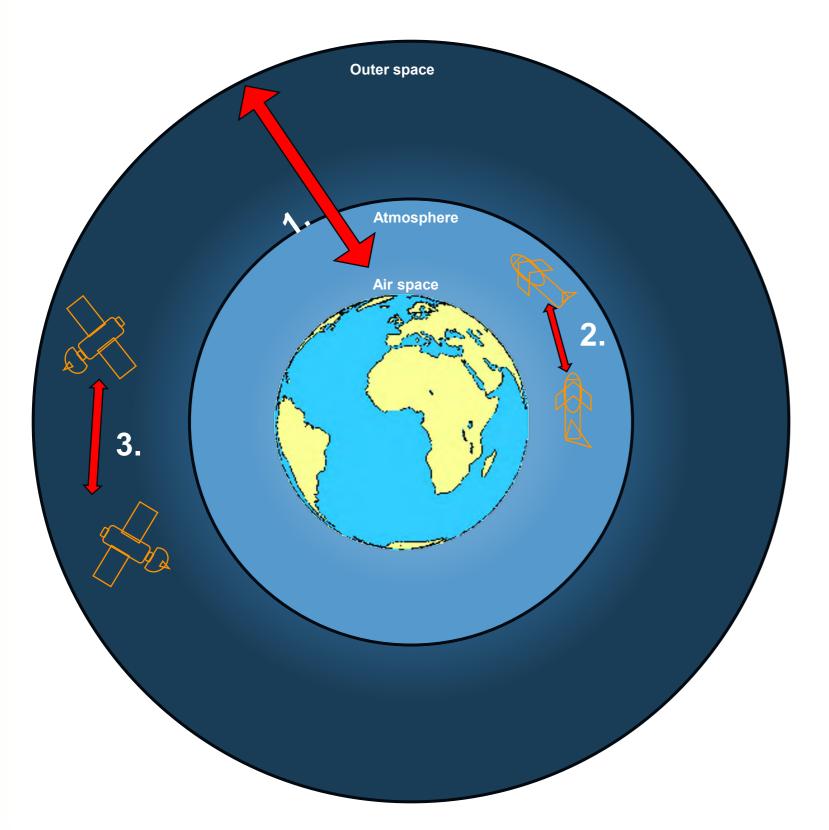
My thesis asks: what can we learn from space activities and their governance to inform future SRM governance?

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## Method: Reasoning by analogy

- Used to progress international law by a range of actors
- Peterson, 1997: analogical reasoning can be more successful than other types of reasoning 'when actors need to develop a workable conception of a new problem or issue quickly'
- Joseph Nye, 2021: 'examining different models and lessons from other issue areas is increasingly important as the need for SRM governance grows more urgent.'





Space activities	(Future) SRM
Activities occur in an area beyond national jurisdiction	Activities occur in an area beyond national jurisdiction
Launched above the Earth	Launched above the Earth
High risk (security and environmental)	High risk (security and environmental)
Technologically advanced	Technologically advanced
Initially small number of States capable	Initially small number of States capable (most likely)

#### **Case studies**

- 1. Governing areas beyond national jurisdiction
- 2. Governing private actors
- 3. Deconfliction





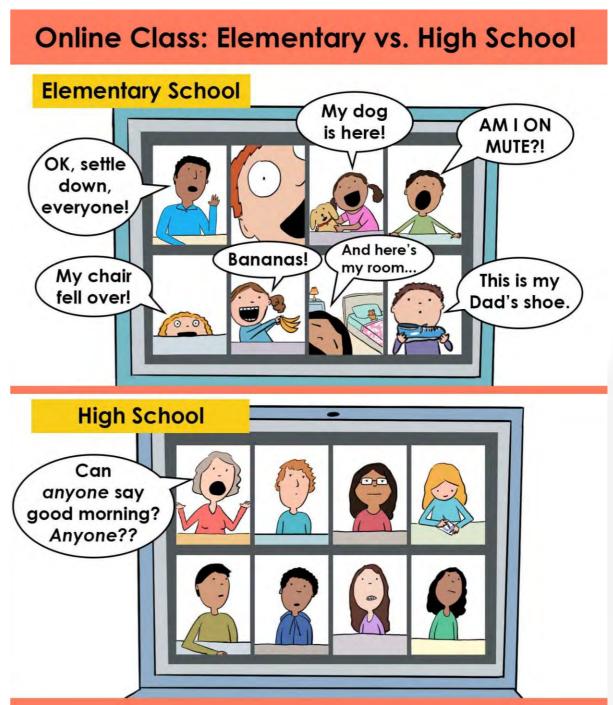
## Mengyuan He School of Education

Preparing for Tomorrow's Remote Learning: Voices of Students, Parents, and Teachers on Their COVID-19 Experiences in Central China



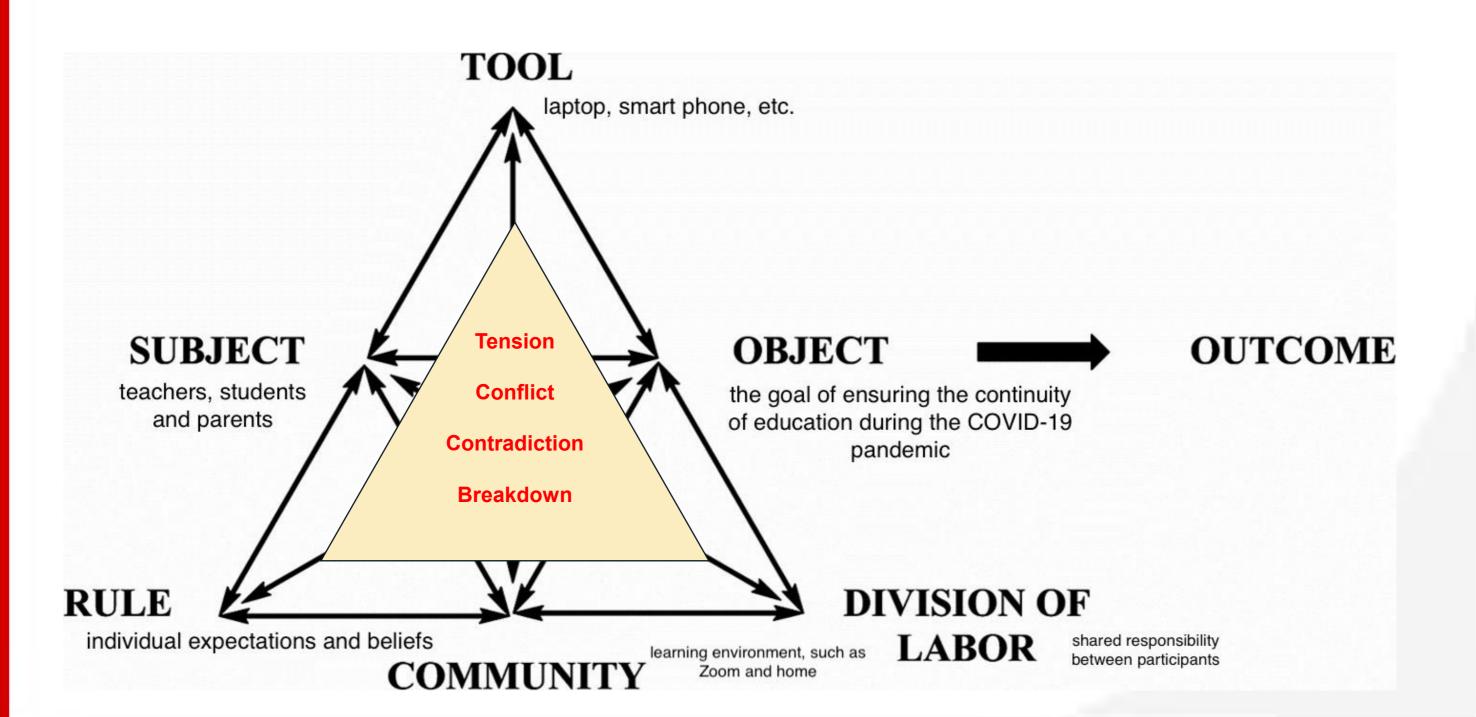
## The significance of exploring remote learning in Central China

- Prepare in advance to respond to emergencies.
- Adapt to future challenges.
- Fill in research gap
- Develop equity in education in Central China





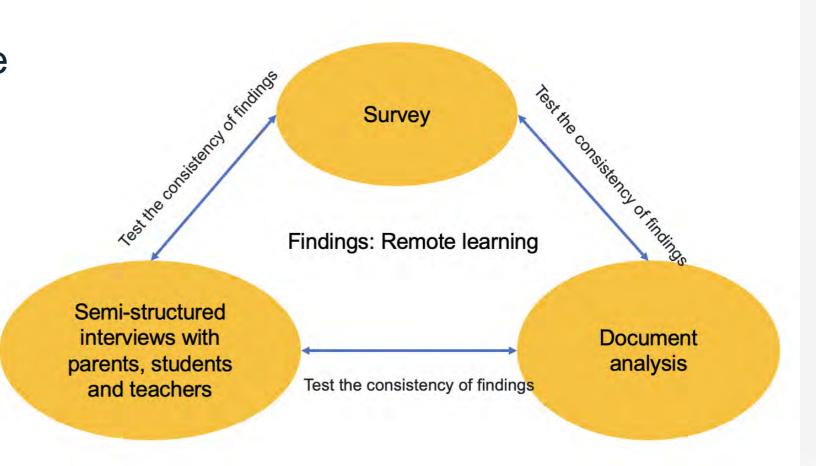
## Understand the problems of the 1st remote learning experience to improve it for the future





### What will I do and what will I achieve?

- Understand the conflicts.
- Provide implications for future remote learning.
- Improve and enhance its
   effectiveness as a solution to
   educational emergencies.
- Promote attention to education in Central China.







Jaclyn Steffan
School of Education

Is the Future of Education Virtual?
The Effectiveness of Virtual Reality
for Learning on the Cognitive Load
of STEM Students



## Meta-analysis on the effectiveness of IVR intervention in comparison to regular instruction based on post-test

		Virtua	I Reality	Regi	ular Ins	truction	Standardised Mean			
Study	Total	Mean	SD	Total	Mean	SD	Difference	SMD	95%-CI	Weight
Andersen et al. (2023)	50	11.86	1.7300	55	10.53	2.6600	- in -	0.59	[ 0.20; 0.98]	3.8%
Chang et al.	24	72.71	10.3100	18	66.39	10.7200	-	0.60	[-0.02; 1.23]	1.9%
Chen et al. (2020)	79	85.06	8.1800	83	79.22	10.2900		0.63	[ 0.31; 0.94]	5.0%
Christopoulos et al. (2022)	25	0.57	0.1300	25	0.49	0.1200	- 0	0.64	[ 0.07; 1.21]	2.2%
Christopoulos et al. (2023)	35	0.65	0.1490	35	0.61	0.1894		0.23	[-0.24; 0.70]	3.0%
Civelek et al. (2014)	106	7.12	4.0850	109	3.53	4.3500		0.85	[ 0.57; 1.13]	5.7%
Ernawati & Ikhsan (2021)	68	78.67	9.4580	34	68.18	12.6860	- 66	0.99	[ 0.55; 1.42]	3.3%
Haci Mehmet and Erol (2021)	36	2.98	1.1826	36	2.41	1.1826	III	0.48	[ 0.01; 0.95]	3.0%
Hauptman (2010)	104	32.13	9.6900	90	26.77	8.9400	<del>- in</del> -	0.57	[ 0.29; 0.86]	5.6%
Hung & Hwang (2010)	170	58.35	11.6700	192	49.84	13.4300	+	0.67	[ 0.46; 0.89]	7.3%
Hwang & Hu (2013)	29	70.24	23.7800	29	59.17	18.7900	-	0.52	[-0.01; 1.04]	2.5%
Kim & Ke (2017)	66	66.79	8.9900	66	65.42	8.8000		0.15	[-0.19; 0.50]	4.6%
Lai et al. (2022)	24	48.33	19.8100	23	40.17	15.7500	- 10	0.45	[-0.12; 1.03]	2.1%
Lalley et al. (2010)	60	12.60	1.9400	42	10.71	2.1300	- 10	0.94	[ 0.52; 1.35]	3.5%
Liu et al. (2022)	170	58.35	11.6700	192	49.84	13.4300	- 1	0.67	[ 0.46; 0.89]	7.3%
Liu et al. (2020)	47	0.71	0.2220	43	0.57	0.2210	- 35	0.62	[0.19; 1.04]	3.4%
Makransky et al. (2021)	64	14.31	2.9300	67	14.35	2.5900		-0.01	[-0.36; 0.33]	4.6%
Parmar et al. (2022)	26	33.65	14.0400	28	29.46	21.5700	- 10	0.23	[-0.31; 0.76]	2.4%
Parmar et al. (2022) (with avatar)	36	42.36	23.7700	28	29.46	21.5700		0.56	[ 0.06; 1.07]	2.7%
Rasheed et al. (2021)	92	7.16	2.1450	92	5.87	2.4550		0.56	[ 0.27; 0.86]	5.4%
Su et al. (2022)	20	58.25	10.0360	20	51.50	12.2580	-	0.60	[-0.03; 1.24]	1.8%
Sun et al. (2010)	63	84.76	12.2600	65	80.38	13.1500	-	0.34	[-0.00; 0.69]	4.5%
Hwang et al. (2024)	29	75.07	21.6300	29	68.72	25.5900		0.27	[-0.25; 0.79]	2.6%
Apardi et al. (2023)	17	92.17	8.5100	20	83.00	13.4100	- *	0.80	[ 0.13; 1.48]	1.7%
Cao et al. (2024) (4th grade)	31	72.35	7.8200	42	67.60	8.9300		0.56	[ 0.09; 1.03]	2.9%
Cruz at al. (2023)	65	2.11	2.2400	65	1.27	1.7900		0.41	[ 0.07; 0.76]	4.5%
Tarng & Pei (2023)	30	10.07	2.7000	30	9.60	3.0300	- 8	0.16	[-0.34; 0.67]	2.6%
Random effects model	1566			1558			<b>*</b>	0.53	[ 0.44; 0.63]	100.0%
Prediction interval							10		[ 0.23; 0.84]	
Heterogeneity: $I^2 = 34\%$ , $\tau^2 = 0.0194$	p = 0.0	04					-1 -0.5 0 0.5 1			



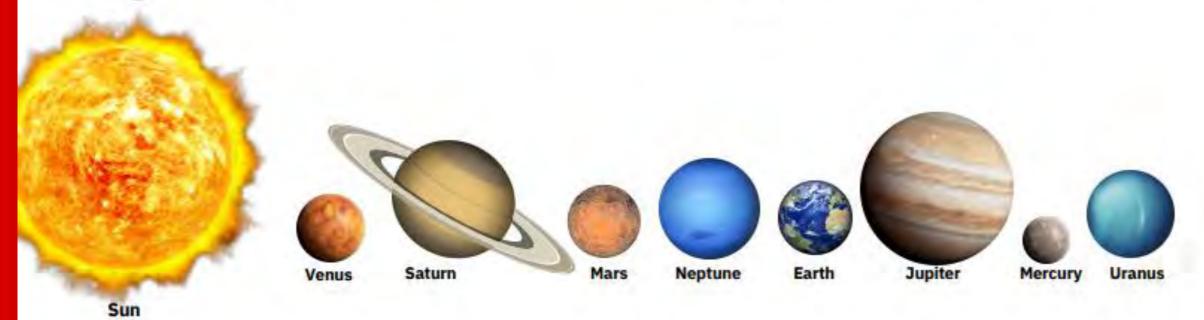


**Research Question:** Does the use of VR for learning STEM content improve achievement and reduce the cognitive load of students when compared to traditional teaching methods?

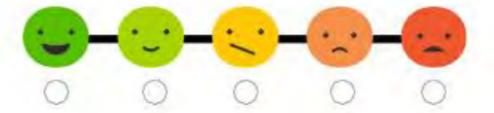
Group	T1	Intervention	T2	Т3	T4
Experimental	Pre-test: 7 days prior to intervention	30-minute VR simulation	Post-test: immediately after intervention	CL questionnaire immediately after T2	Post-test: 7 days after intervention
Control	Pre-test: 7 days prior to intervention	30-minute traditional science lesson	Post-test: Immediately after intervention	Cognitive load questionnaire Immediately after T2	Post-test: 7 days after intervention



4. Circle the planet which is shown in the VR simulation to have a hexagonal storm located at the north pole.



b. How difficult did you find this question?







Plenary 1: Internships and Career Panel

**Hickinbotham Hall** 







# Broughton and Ferguson Session 2 Working Together

**Chair: Bahare Dadgar** 

Room coordinator: Dr Rachel Bleeze





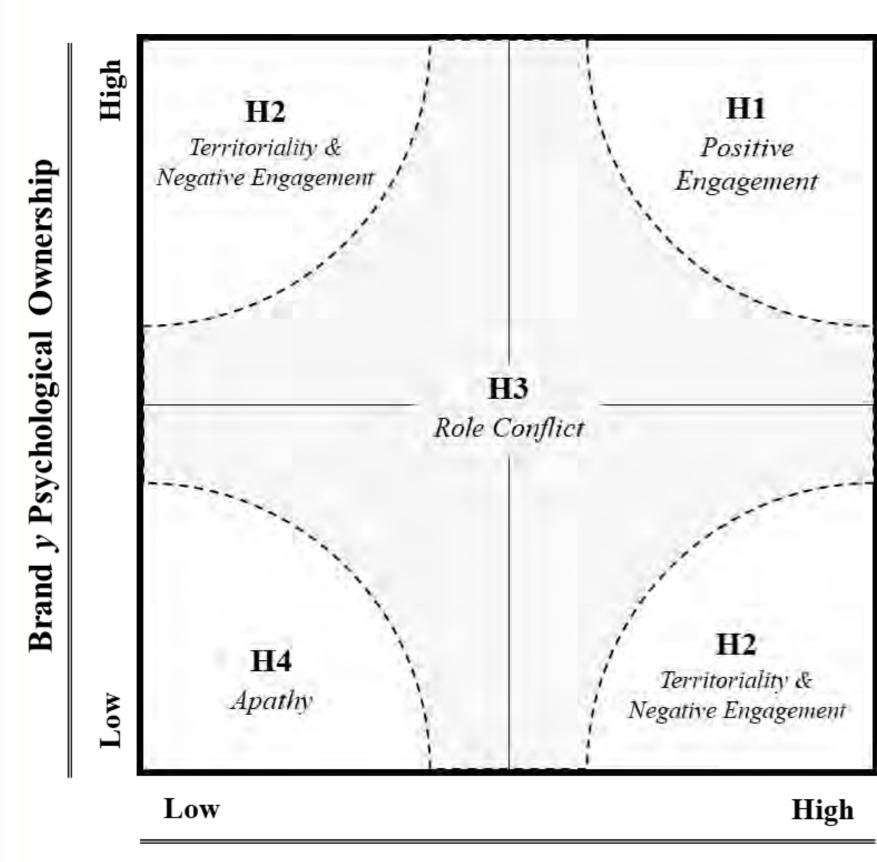


## Harrison de Picot Business School

Examining **Engagement Interplay** in a sports context



- Literature on engagement in marketing has typically followed 'Customer Engagement'
  - CE views companies as sellers, and people as buyers in dyadic relationships
- 'Actor Engagement' broadens its view, studying 'actors' that invest their resources (i.e., time, money, engagement) in interactions with other interrelated actors (i.e., other people, brands, AI) in complex multi-actor networks (Brodie et al., 2019; Li et al., 2017)
- People's resources are finite, and multiple actors (i.e., brands) are competing for this 'share of engagement'
- Need to examine the effects between multiple points of focus (multi-foci) upon actor engagement (interplay) (Alexander et al., 2018; Clark et al., 2020; Fehrer et al., 2020; Ho et al., 2020; Hollebeek et al., 2023; Li et al., 2017; McDonald et al., 2022; Sharma et al., 2020)
- Sport in Australia presents a rich context to study engagement
  - Likelihood of multiple touchpoints is high, and consumer relationships with sporting brands are uniquely strong (McDonald et al., 2022)
  - "No other nation can claim, particularly relative to population size, to be home to as diverse a sport ecosystem in Australia" (Fujak, 2021, p. 8)



Brand x Psychological Ownership

#### **Psychological Ownership**

When individuals (groups) feel as though the target of ownership (tangible or intangible) is 'MINE' ('OURS'), regardless of legal claim to the target or not (Pierce et al. 2001)

#### **Positive (Negative) Engagement**

Positive (Negative) thoughts, feelings & behaviours

#### **Territoriality**

Constructing, communicating, maintaining & restoring territories around objects which one feels attachment towards (Brown et al., 2005)

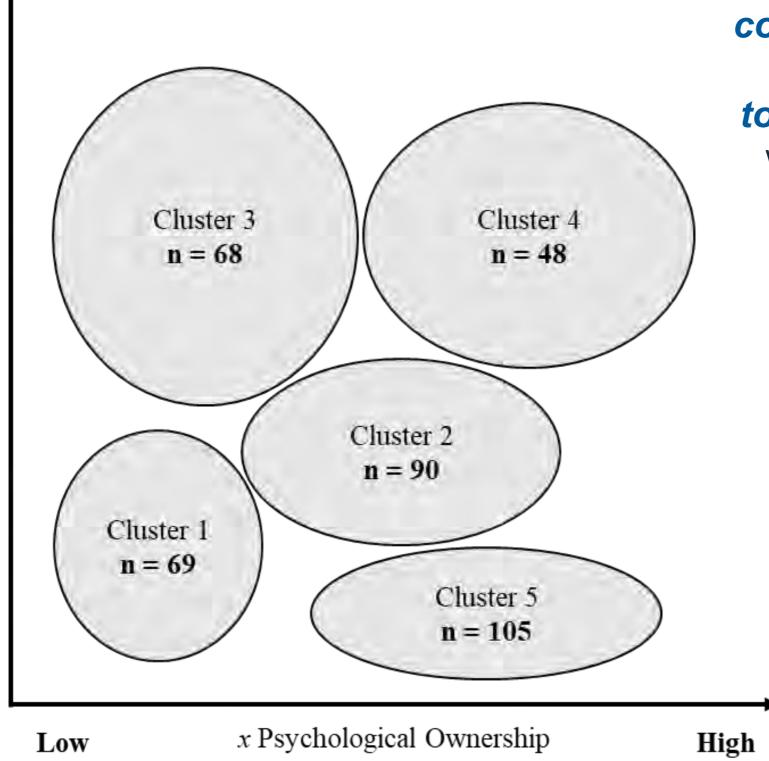
#### **Role Conflict**

When a person receives a set of incompatible tasks or roles (Rizzo & House 1970)

#### **Apathy**

Absence or lack of feeling, interest or concern (Marin 1990)





We define 'Engagement Interplay' as the concurrent interaction of an actor's internal dispositions and operant(d) resources towards multiple actors (engagement foci), which we argue influences engagement outcomes

$$n = 380$$

Hierarchical Cluster Analysis

PROCESS Model via SPSS

Structural Equation Modelling (Partial Least Squares)

We find statistically significant differences between engagement towards sporting brands across the five-cluster solution

15 (YEAR

of ADELAIDE

- 1) We respond to calls within the (multi) actor engagement literature to examine the interaction of engagement objects, offering a new contribution in our novel concept 'Engagement Interplay'
- 2) We extend Psychological Ownership into the multi-actor domain as a dynamic construct to explain negative and disengagement (brand) engagement outcomes
- 3) Our work can aid managers to understand unintentional / underlying engagement transfer effects
- 4) We provide evidence of (multi) Actor Engagement unfolding in a rich context Engagement in sport research has tended to follow, rather than drive advancements in the area



## Yalin Han Adelaide Business School

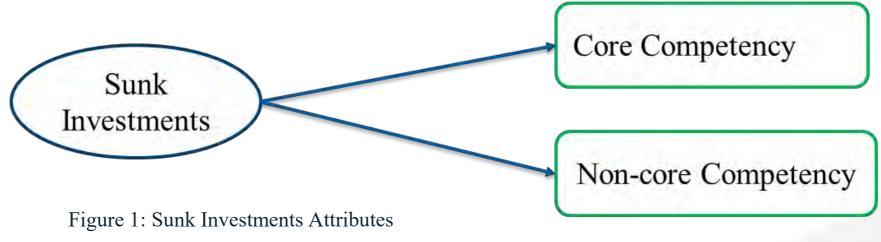
Do Asset Specificity and Sunk Investment Always Deter Outsourcing Decision? An Experimental Study







- Asset specificity: level of **customization** of an asset or resource connected with the transaction.
- Sunk investments: diverse attributes.





### Research Methodology

2*2 De	Asset specific transactions		
		High	Low
Sunk investment	Core competency		
in competency	Non-core competency		

Figure 2: 2\*2 Experiment Design

evaluating whether to outsource production function relating to the mountain bikes or keep it internal within the organisation Participant finds out if the company invested in core competency or non-core competency Participant finds out if the product is customised or standard to the company Participant indicates likelihood of outsourcing Participant completes PEQ

Participant assumes role of a product manager

#### "Likelihood of outsourcing"

How likely would you outsource the production of components of the mountain bike:

- a. Front suspension fork
- b. Frame
- c. Full mountain bike

1-Highly unlikely to outsource7-Highly likely to outsource



**15 QEARS** 

#### Results

#### **Competency**

	df	Mean Square	F	р
Competency	1	13.424	6.135	.015
AS	1	8.488	3.879	.052
Competency * AS	1	1.440	.658	.420
Error	85	2.188		

Full mountain bike: Managers are more likely to outsource activities with sunk investments in *non-core competency resources* as against core competency resources (non-core-5.38 vs core-4.62, p=0.015).

#### **Asset specificity (customization)**

	df	Mean Square	F	р
Competency	1	2.027	1.196	.277
AS	1	7.660	4.520	.036
Competency * AS	1	.409	.241	.624
Error	85	1.695		

Frame: Managers are more likely to outsource *low asset-specific investments* as against high asset-specific investments (low AS-5.88 vs high AS-5.33, p=0.036).

#### **Interaction effect**

	df	Mean Square	F	р
Competency	1	4.005	1.786	.185
AS	1	2.006	.895	.347
Competency * AS	1	.014	.006	<mark>.938</mark>
Error	85	2.243		

**No interaction effect** of competency and asset specificity on the outsourcing decision.

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### Proposed Contributions

- Extend sunk cost literature to test the specific circumstances of core and non-core competency resources.
- Use sunk-cost fallacy to explain the potential reasons behind current mixed findings in relation to the core competency literature.
- Practical implications for firms: Organizational capability considerations rather than opportunism concerns alone.





## Yanlin Liu Adelaide Business School

Common ownership and its impact on executive mobility

## **Background and Literature**

Common Ownership: Large institutional investors own shares in competing firms in the same industry.

Panel A: Technology Firms				
Apple	[%]	Microsoft	[%]	
Vanguard	6.05	Vanguard	6.41	
BlackRock	5.72	BlackRock	5.80	
State Street	3.82	Capital Research	4.76	
Fidelity	2.34	- Steve Ballmer -	4.24	
Northern Trust Corporation	1.26	State Street	3.80	
A CONTRACTOR OF THE PARTY OF TH		- Bill Gates -	2.54	
		T. Rowe Price	2.27	

- ➤ Common ownership among same-industry firms can reduce firms' incentives to compete (Rotemberg, 1984; Reynolds and Snapp, 1986).
- Common ownership has anticompetitive effects in the product market (He and Huang 2017; Azar et al., 2018).

## **Common Ownership and Executive Mobility**

- ➤ Human capital is a source of competitive advantage for a firm (Wright et al., 2003; Chadwick and Dabu, 2009; Ployhart and Moliterno, 2011).
- ➤ Corporate executives are important in a firm's operation and strategic decision-making process (Hambrick et al., 1996; Boeker, 1997; Carpenter, 2002).
- Firms actively compete in the labor market by attracting and motivating high-rank employees (Coff and Kryscynski, 2011).
- ➤ Research Questions: What is the effect of common ownership on the corporate executive labor market?

## **Empirical Results**

> Common ownership is negatively correlated with corporate executive mobility (H1).

Mobility Indicator  $exe,i,t+1 = \alpha + \beta_1 CommonOwn_{i,t} + \gamma X_{i,t} + FixedEffects + \varepsilon_{exe,i,t}$ 

Variable	(1)	(2)	(3)	(4) Dependent	(5) Variable: Mobili	(6) ty Indicator	(7)	(8)	(9)
,	L	ogit Regressions		OLS Regressions					
EW Kappa	-0.277*** (0.000)		-	-0.028** (0.032)	To the same	A	-0.035** (0.017)	1.3.00	•
Cosine		-0.252*** (0.004)	A. C. C. C.	2,777	-0.065*** (0.001)	30.00	2.126.10	-0.064*** (0.003)	100
VW Kappa	1		-0.238*** (0.000)		1	-0.037*** (0.000)	with the same		-0.047*** (0.000)
Firm Size	0.033***	(0.000)	(0.000)	0.009**	0.009**	0.009** (0.012)	-0.045*** (0.000)	-0.045*** (0.000)	-0.044*** (0.000)
ROA	-1.096*** (0.000)	-1.088*** (0.000)	-1.086*** (0.000)	-0.178*** (0.000)	-0.177*** (0.000)	-0.177*** (0.000)	-0.111*** (0.000)	-0.111*** (0.000)	-0.110*** (0.000)
Leverage	0.136***	(0.001)	(0.004)	0.024* (0.052)	0.023*	(0.065)	0.070***	0.069***	(0.000)
CAPEX	-0.957*** (0.000)	-0.951*** (0.000)	-0.945*** (0.000)	-0.144*** (0.001)	-0.141*** (0.002)	-0.142*** (0.002)	-0.148*** (0.002)	-0.146*** (0.003)	-0.146*** (0.003)
R&D	0.204 (0.213)	0.185	0.269 (0.102)	-0.064 (0.320)	-0.068 (0.292)	-0.068 (0.296)	-0.175** (0.019)	-0.178** (0.017)	-0.179** (0.017)
FCF	-0.235*** (0.000)	-0.225***	-0.235*** (0.000)	-0.038*** (0.003)	-0.037*** (0.004)	-0.038*** (0.003)	-0.020 (0.114)	-0.019 (0.134)	-0.020 (0.112)
CF Vol	0.433*** (0.000)	0.412*** (0.000)	0.444*** (0.000)	-0.053*** (0.009)	-0.055*** (0.007)	-0.054*** (0.008)	-0.046* (0.057)	-0.047** (0.050)	-0.046* (0.056)
Stock Ret	-0.201*** (0.000)	-0.202*** (0.000)	-0.201*** (0.000)	-0.024*** (0.000)	-0.023*** (0.000)	-0.024*** (0.000)	-0.012*** (0.000)	-0.012*** (0.000)	-0.012*** (0.000)
IDD Adoption	-0.019 (0.228)	-0.020 (0.222)	-0.020 (0.220)	0.024 (0.184)	0.024 (0.183)	0.024 (0.186)	0.008	0.008 (0.722)	0.008
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	No	No	No	No	No	No
Firm FE	No	No	No	Yes	Yes	Yes	No	No	No
Firm-Executive FE	No	No	No	No	No	No	Yes	Yes	Yes
No. of obs.	127,775	127,775	127,698	127,767	127,767	127,690	119,668	119,668	119,583
R <sup>2</sup>	0.015	0.015	0.015	0.097	0.097	0.097	0.289	0.289	0.289





## **Empirical Results (Cont.)**

- ➤ If common ownership restricts competition among companies by curbing executive mobility, we anticipate this effect to be more evident for executives who possess more attractive outside opportunities (H2).
- ➤ When considering the design of compensation contracts, research has found that longer pay duration (Gopalan et al., 2021) and a higher option intensity (Ittner et al., 2003; Balsam and Miharjo, 2007) reduces executive mobility. Therefore, we predict that common owners set executive pay with longer duration and higher option intensity to retain managerial talents in their portfolio firms (H3).

 $\begin{aligned} &Compensation_{exe,i,t+1} \\ &= \alpha + \beta_1 CommonOwn_{i,t} + \gamma X_{i,t} + FixedEffects + \varepsilon_{exe,i,t} \end{aligned}$ 





## Vanessa Kreusch Arts

Supporting non-native speakers to give successful academic presentations



## 1. Multilingualism in Academia

"Language is not merely a conglomeration of word forms which are attached to language-independent elements of knowledge. Rather, the organisation, storage and sharing of knowledge itself ensues in linguistic form."

Ehlich (2009, p. 91)

Translation by Vanessa Kreusch



## 2. Prepositional phrases

spatial: Wir fahren in die Schule. ('We are driving to school.')

temporal: Der Bus kommt in zwei Minuten. ('The bus will arrive in two minutes.')

modal: Er baut Regale aus Metall. ('He builts shelves made of metal.')

causal: Sie singt <u>aus Langeweile</u>. ('She sings <u>out of boredom</u>.')



## 3. Abstract prepositions

(1) (SV\_DE\_036, AM\_0211, L1)

das geht dann jetz dann schon sehr hier in die ähm (0.2) richtung vom informellen sprachgebrauch So, this goes now, here it very much goes in the direction of informal language use.

(2) (SV\_DE\_065, SH\_0291, L1)

als letztes wollen wir (.) auf die evaluation der lernerfolge (.) °h eingehen Finally, we would like to touch upon the evaluation of the learning success.





## Ricky Fernandes Education

Characteristics of facilitated critical thinking when students listen to and speak English as an additional language in Indonesia



## Why 'critical thinking' in English as an additional language?



1. Facing rapid changes in global concerns including Industrial Revolution 4.0 and the related Education 4.0

2. Why is there any scarcity in teachers' practices when facilitating critical thinking in English as an additional language?

3. Promoting the understanding of Indonesian teachers' CT facilitation in English listening and speaking and students' learning outcomes



## Is there any conceptual framework to facilitate critical thinking in English, especially for listening and speaking?

Framework for facilitating Critical Thinking in English Listening and Speaking (CTELS) for high school students - English as an Additional Language

	Dimensions of CTELS					
Students develop critical thinking in English listening and speaking when they	Clarity  Students communicate key ideas in a precise manner	Relevance  Students communicate key ideas that are related to the given information/topics	Depth  Students communicate detailed explanations of key ideas to develop thorough arguments	Coherence  Students communicate arguments of k ideas in a logical sense to build the overall intended meaning		
a. Evaluate & Determine  What will we trust?  Students evaluate and determine the credibility of given information/sources by communicating their key ideas.	Students evaluate and determine the credibility of given information/sources by communicating their key ideas precisely, clearly asserting the main purpose of the given information/source. Evidence is presented in the context, and direct links between evidence and claims are made explicit.	Students evaluate and determine the credibility of given information/sources by communicating their key ideas that are closely aligned with the most important information and support the topics.	Students evaluate and determine the credibility of given information/sources by communicating detailed explanations to develop their key ideas.	Students evaluate and determine the credibility given information/sources by communicating the key ideas with logical and coherent structures. Logical and causal relationships are identified.		
b. Find & Generate  What will we use?  Students find and generate their key ideas from given information/sources by using given methodologies.	Students find and generate key ideas from given information/sources by using given methodologies. Students communicate their key ideas by clearly asserting the main purpose of the given information/source. Points at issues are clearly defined and stated.	Students find and generate key ideas from given information/sources by using given methodologies. Students orally discuss their key ideas that are related to the given topics. Direct links between evidence and claims are made explicit.	Students find and generate key ideas from given information/sources by using given methodologies. Students also consider alternative perspectives in relation to the given information/topics by communicating with breadth to ensure that they do not ignore any important components.	Students find and generate key ideas from giver information/sources by using given methodologies. Students communicate their most important key ideas related to the significance of given information/sources. Claims for logical coherence are examined through evidence and methodology.		
c. Embark & Clarify What is our purpose?  Students orally respond to given questions/tasks and clarify their key ideas while considering ethical, cultural, social and team (ESCT) issues.	Students orally respond to given questions/tasks and discuss key ideas by clearly asserting the main purpose of the given information/source. Students orally clarify questions, terms, requirements, expectations and ethical, cultural, social and team issues.	Students orally respond to given questions/tasks and discuss the most important information related to the given topics. Students orally clarify questions, terms, requirements, expectations and ethical, cultural, social and team issues. Given information that is significant and relevant is highlighted.	Students orally respond their key ideas to given questions/tasks and discuss the complexities of the given information/sources. Students orally clarify questions, terms, requirements, expectations and ethical, cultural, social and team issues.	Students orally respond to given questions/tasks and discuss the premises of given information/sources that support conclusions. Students orally clarify questions, terms, requirements, expectations and ethical, cultural, social and team issues.		
d. Organise & Manage  How do we arrange?  Students organise given information/sources. to reveal their key ideas while managing the processes through spoken conventions.	Students organise and manage given information/sources to reveal their key ideas that are aligned with the given information/source. Students clearly assert the main purpose of the given information/source by communicating their key ideas.	Students organise and manage given information/sources to reveal their key ideas that are aligned with the topics by communicating the causal relationships.	Students organise and manage their key ideas by communicating detailed and thorough explanations and/or arguments.	Students organise and manage given information/sources to reveal their key ideas by communicating detailed explanations and/or arguments, intended to build the logical sense of meaning.		
e. Analyse & Synthesise What does it mean?  Students analyse and synthesise given information/sources to produce their key ideas and coherent understandings.	Students analyse and synthesise given information/sources to produce key ideas and coherent understandings by clearly asserting the main purpose of the given information/source.  Students communicate their own examples, and the structures are clear, unambiguous and easy to understand.	Students analyse and synthesise given information/sources by communicating their key ideas and coherent understandings that are aligned with the given information/topics.	Students analyse and synthesise given information/sources to produce key ideas and coherent understandings by communicating detailed explanations and/or arguments. Students communicate their key ideas by considering alternative perspectives and justifying arguments.	Students analyse and synthesise given information/sources to produce key ideas and coherent understandings by communicating the arguments intended to build the logical sense of meaning. Students communicate by developing key ideas and using transition phrases to identif logical and coherent progression.		



### 'How' did I conduct the research and 'What' did I find?

- 1. Data triangulation;
- a. Teacher pre- and post-interviews
- b. Student classroom observations
  - c. Teacher teaching documents

- 2. Methods to analyse the data;
- a. Interpretative Phenomenological Analysis (IPA)
- b. Pattern-matching with the CTELS framework
- c. Curriculum and documents to search for congruence with other data

3. The findings showed that the teacher initiated student active listening and speaking by targeting one student to answer her question about the given video, allowing students to respond to one another.

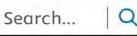


## Publication for wider society



Journals & Books







Ricky Fernandes





#### Outline

Abstract

Keywords

- 1. Introduction
- 2. Methods
- 3. Results and Analysis
- 4. Discussion
- 5. Implications and Conclusion

Disclosure Statement

CRediT authorship contribution statement

Acknowledgment

Appendix A. Framework for facilitating Critical T...

Appendix B. Interview protocol

Appendix C. Classroom Observation Protocol (Fie...

Appendix D. Documents

Data availability

References

Show full outline 🗸

Tables (1)



#### Thinking Skills and Creativity

Available online 19 March 2024, 101513

In Press, Journal Pre-proof 

What's this?



Recommended articles

No articles found.

#### Characteristics of facilitated critical thinking when students listen to and speak English as an additional language in Indonesia



#### **Abstract**

This article presents a qualitative case study of a teacher facilitating Critical Thinking (CT) through listening and speaking in an English as an Additional Language (EAL) Year 10 Indonesian high school class. Such CT facilitation and development are required not only by the Indonesian government's EAL policies, but also in other countries with developing economies. CT is thought to promote language acquisition as well is being developed through language learning, if well-facilitated. This article presents a case study of a





FEEDBACK 💭



## Amy Robinson School of Education

Teaching how we learn:
Contrasting personal and
professional pedagogical beliefs in
a teaching graduate assessment

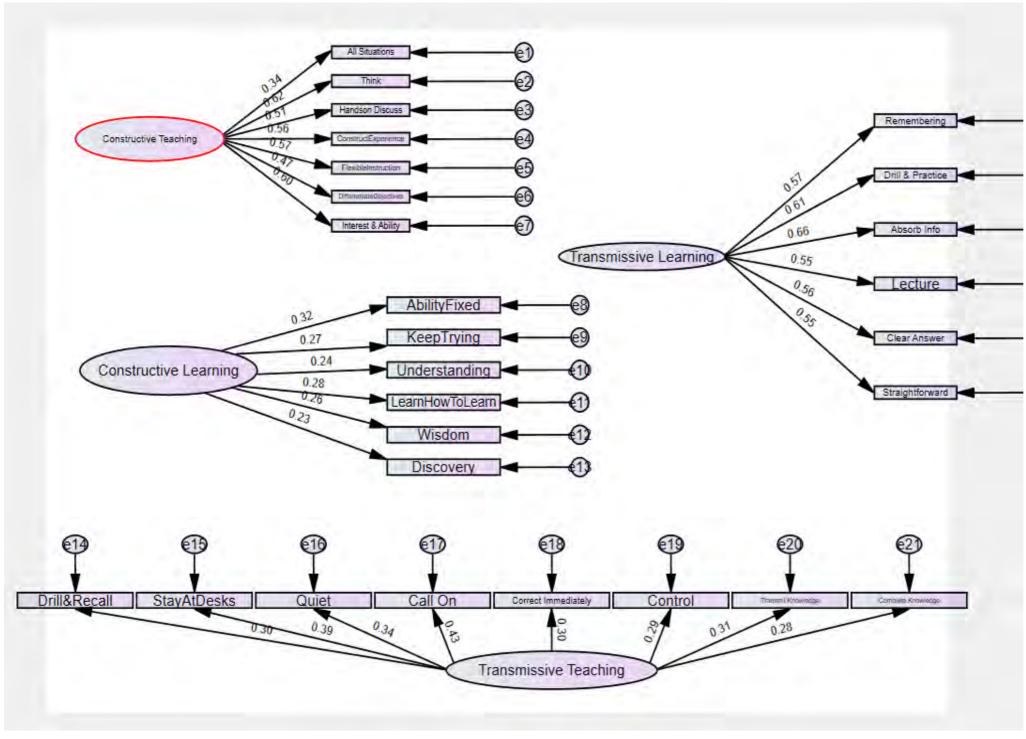


### **Context: 2023 HDR Presentation**

- Federally mandated graduate assessment (TPA)
- Proposal for collecting PSTs' demographic data, belief survey, and performance data.
- Measuring the relationship between these variables and impact on classroom or profession readiness.



## **Current Findings**



- CT stronger than TT
- TL stronger than CL
- PSTs prefer to teach constructively but learn transmissively.
- A conflict between the personal and professional T&L beliefs.
- Understand if they are in conflict or merely different approaches in the one set of practices.

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## What Next: Performance Alignment

- Thematic analysis of written TPA tasks.
- Continue to collect cohort-level mixed methods data until end of 2025.
- Project can be used as a mechanism to track the ongoing conversation of how PSTs are assessed to demonstrate 'classroom readiness'.





Jack Hetherington
School of Economics and Public
Policy

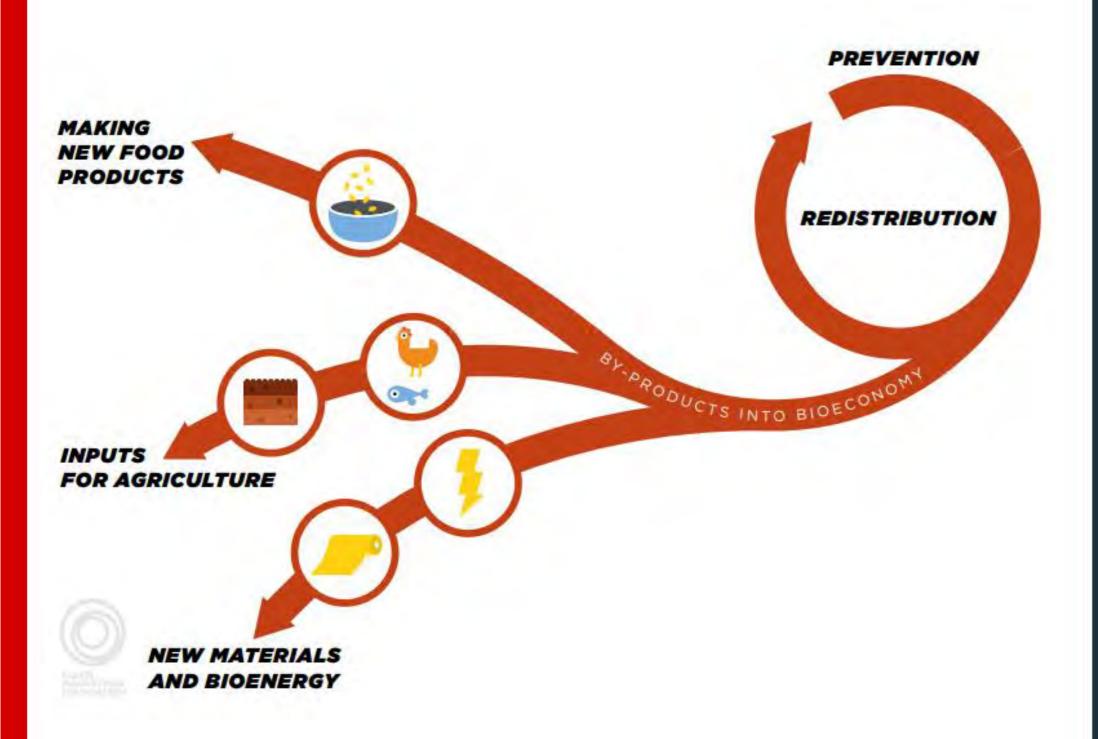
Barriers to circular economy adoption are diverse and business model-specific:

Evidence from the Australian cheese manufacturing sector









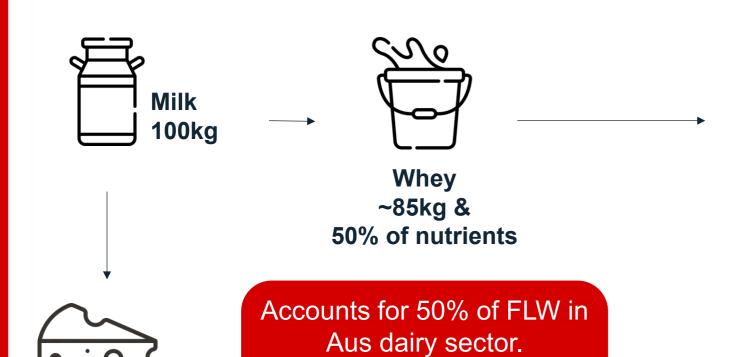
Sustainable Development Goal (SDG) 12.3: Halve food waste by 2030

- Target adopted by governments and industry
- Relies on actors throughout the supply chain to engage in the 'circular economy' – i.e. reduce, reuse, recycle, recovery.
- Each year Australia generates 7.6 mil tonnes p.a. of food loss and waste (FLW), 50% is preconsumer.

15 CYEARS

of ADELAIDE

### Case study: Cheese whey



Cheese

~15kg



#### **Methods:**

- 42 Semi-structured interviews were recorded, transcribed & thematically analysed.
- Nov 2022 Jun 2023.
- Sample accounts for 31% of the Australian industry and is representative across production scales & states.
- Ethics Approval Number: H-2022-206



Costs Aus manufacturers

\$578mil p.a.<sup>1</sup>

In-house: Do it yourself





Focal company: Accept waste from others





Third party:
Give waste to another firm





In-house: Do it yourself

Focal company: Accept waste from others



There aren't renough!
hours in!

Every aspect of the business would need to change



It's extra risk



Do they meet my product spec?



No one's nearby

can't just give it away

You

Are we on the same page?

Who's managing this thing?



Joint venture: Partnership with others



15 CYEARS

Third party:

Give waste to another firm



#### Irene Nikoloudakis Adelaide Law School

Introducing Legal Regimes
Criminalising 'Wage Theft':
Possibilities and Pitfalls

#### The Prevalence of Wage Theft

- > Approximately \$1.35 billion of underpayments each year
- One in six migrant workers paid less than the national minimum wage
- Industries most affected include the horticulture, cleaning and hospitality sectors





## Why Does Wage Theft Occur?

- ➤ Genuine mistakes and misunderstandings of employment laws, regulations and industrial instruments
- Deliberate choice by unscrupulous employers to increase profits (e.g. 7-Eleven scandal)





## Regimes Criminalising Wage Theft in Australia

- Victoria and Queensland were the first jurisdictions to criminalise wage theft in Australia
- Wage theft offence also introduced at the Federal level
- ➤ Need to consider whether the offences will be effective in practice in deterring wage theft and ensuring labour law compliance





"Wage theft" now illegal in QLD

#breakingnews 🐔



## **Further Reading**

Irene Nikoloudakis and Stephen Ranieri, 'Criminalising "Wage Theft" in Australia: A Proposed Regulatory Model' (2023) 46(4) University of New South Wales Law Journal 1134

THEMATIC ISSUE: POWER, WORKERS AND THE LAW







#### Jyoti Jiban Khisha Adelaide Business School

Examining the acquisition of optimism in entrepreneurial ecosystems



#### Let us Consider Today -

**ABLE HDR Conference** 

**Multiple Activities** 

A First Year HDR Student - will think to do few or all of the activities in 2025.

We May call it – Motivation, Inspiration, Initiative ....

2024 ABLE HDR CONFERENCE
STUDENT REGISTRATIONS

10TH APRIL 2024
NATIONAL WINE CENTRE
8:30AM - 5:00PM

THE UNIVERSITY 15 CEAS

(ABLE 2024)

The common element - Positive



#### **Exploring the Phenomenon**

Have a intuition that with all the positive activities and interactions in an startup incubator the entrepreneurs acquire optimism.

Entrepreneurs "Success" depends both intrinsic and extrinsic factors

Extrinsic – Entrepreneurial Ecosystem (EE)

Intrinsic - Optimism, Passion, Self-efficacy etc.

Entrepreneurs are more optimistic than the general population

(Hmieleski & Baron 2008)





#### My Research

" What is the nature of Optimism, its antecedents, and its consequences on entrepreneurs in the Entrepreneurial Ecosystem?"

How it manifest in EE? > Social Learning Theory (Bandura & Walters 1977) > Participant Observation

What factors influence this process? > Text Analysis

What are the consequences? > State Optimism (Kluemper, Little & DeGroot 2009) > Longitudinal Survey



#### My Research

#### **Hope to Contribute by –**

Explain the Phenomena and expand literature on Entrepreneur's Optimism

Study the activities and its impact of the – Startup Incubators

Understand the implication of acquisition of optimism

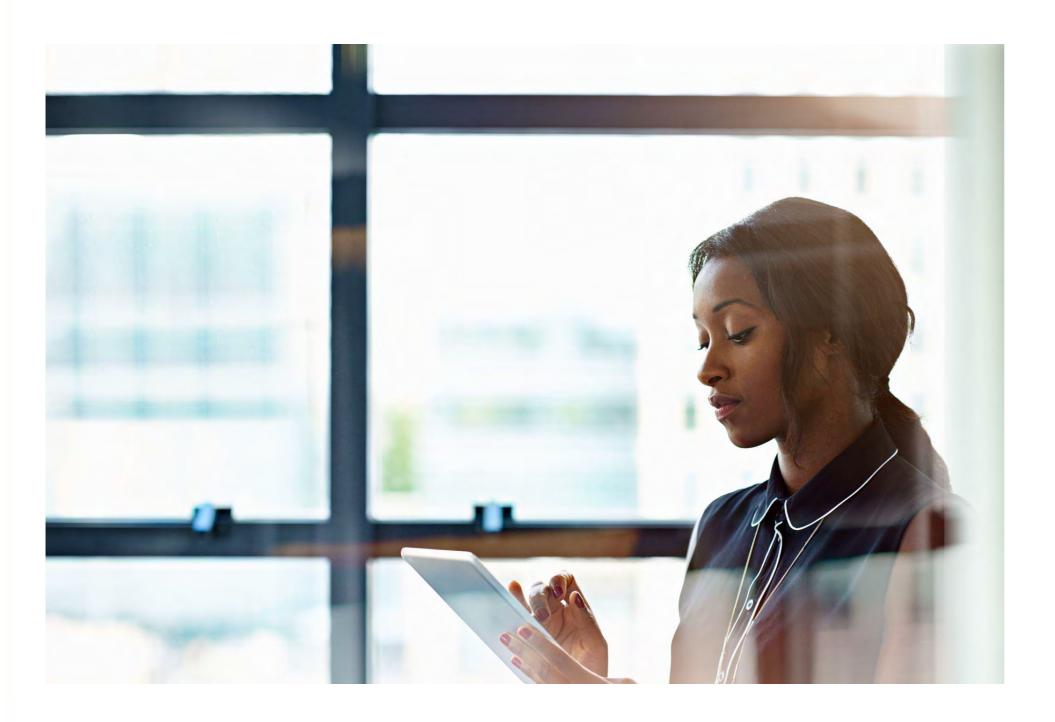
#### So Far -

**Data collection Phase of Study 1 and Study 2** 

Thanks!! Questions?? Feedbacks...



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# Reseracher Profiles Workshops and HDR Awards

Hickinbotham Hall





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