

**CHERSNet meeting  
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# **Q-riosity and the shared illusion of the Japanese generalist and specialist: a Q-methodology study**

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A collage of Japanese scenery. The left side shows a large cherry blossom tree in full bloom against a clear blue sky, with a traditional white building with a black roof visible in the lower left. The right side shows a traditional Japanese building with a dark tiled roof and white walls, surrounded by lush green bamboo and other trees. In the foreground on the right is a large, ornate stone lantern. The text is overlaid on a light pink background.

ようこそ!

Greetings from  
Fukushima, Japan



# In this talk...

Focus on 3 areas of interest arising from my MEd:

- **1. Limitations of western philosophical paradigms** when applied to the Japanese context
- **2. How an external cultural perspective** led to beneficial methodology adaptations
- **3. How culturally specific research** can deliver results of **international value**

# Background

In Western (Anglophone/European) medical cultures:

- **Perceptions of divisions between specialities = lived experience of doctors align.**
- **Split between 'generalist' and 'specialist' careers - leading to the stigmatisation of some specialities.**
- **The universal applicability of 'generalism' and 'specialism' is assumed and remains unchallenged.**

# Background

- Medical speciality divisions have not been explored outside of Western contexts
- Japan operates a healthcare system where the nature of medical practice is **not easily separated into generalist and specialist silos**

**Therefore,**

**Examination of the cultural constructs of professional divisions in Japanese medical practice may provide valuable insights.**

# Research question and aims

Aim to reveal the inherent conceptualisations guiding the ideas of specialism and generalism in medicine, as perceived by Japanese health professionals.

## **Specifically:**

- 1) Understand how such conceptualisations operate in practice.**
- 2) To explore the extent the subcultures identified correspond to Western ideas of medical 'specialism' and 'generalism'**

# Selection challenges of a suitable research paradigm

**Ontology:** Position between **realist perspective knowable reality** and **idealist multiple subjective constructed realities**

**Epistemology:** Continuum of **objectivism** (independent meaning ascertained by detached researcher) and **subjectivism** (meaning internally imposed, researcher has transactional role)

However this:

- Promotes an **Anglo-Eurocentric approach** –constrains and undermines endogenous knowledge systems
- **Ethnocentrism as an apriori principle** undermines the research process even before data is collected (*Oppong 2013*)
- Question the rationale in using such paradigms with the **loss of national identity incurred** as a result (*Kim and Brown, 1991*)

# Differences between Eastern and Western cultures

## Historical roots:

*Nisbett and Masuda, 2003*  
*Kobayashi and Greenwald, 2003*

Ancient Greek categorisation and logic  
vs Ancient Chinese holism and interdependence

## Self-construal:

*Markus and Kitayama, 1991*  
*Lebra, 1976 (incompleteness)*  
*Hashimoto, 2011 (ideal)*  
*Hamaguchi, 1985 (linguistics)*

Western independent self- construal  
Eastern interdependent self-construal

## World view:

*Nisbett and Masuda, 2003*

Influences cognition, perception, application of  
logic and dialectics



# Incompatibility with Western paradigms

- **Clash with the detached observer**/researcher in western frameworks
- Even interpretivist ontologies and multiple realities focus on subjective imposed meaning rather than meaning through **shared connections**
- Stances imposed by Western **frameworks force an unnatural position of evaluation by an outsider**, fails to satisfactorily explain Japanese phenomena (*Hamaguchi, 1985*)

# Key philosophical constructs

- **Norinaga Motoori (1730-1801)**
- **Tetsuro Watsuji (1889-1960)**
- **Kitaro Nishida (1870-1945)**

- **Ontology that is neither subjective nor objective**
- **Reality as a field – shared reality created by all participants**
- **Interconnected experience of the world**

- **Takaaki Yoshimoto (1924-2012)**
- **'Shared Illusion' of the state as communal illusion**
- **constructed reality supported through shared belief**

**Search for a research paradigm and a methodology to accommodate these**

# Practical challenges

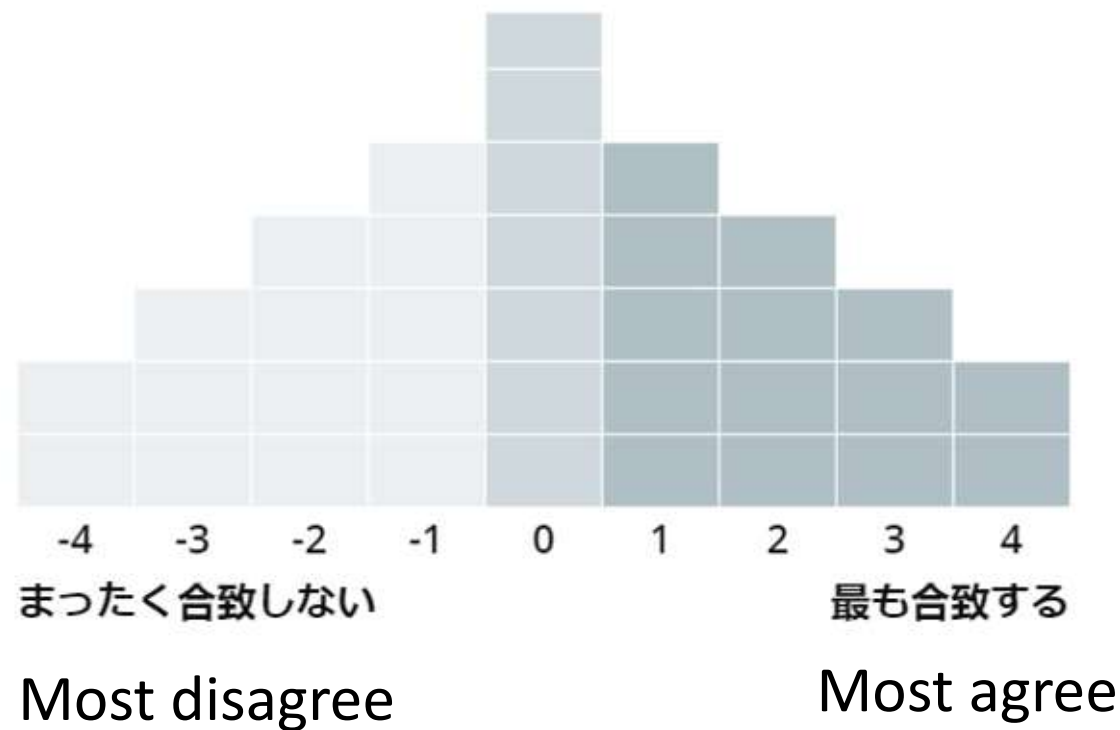
- Interviews and focus group methods rejected – **language limitations and restriction of participants, validity of data**
- **Reference group effect** – presence as an outsider changes views expressed (*Heine et al, 2002*)
- **Group behaviours** – negative self-evaluation is socially incentivised in a group setting (*Brown and Kobayashi, 2002; Greenwald and Kobayashi, 2003; Yamaguchi 2007*)
- **Acquiescence response bias** (*Smith 2004; Hashimoto and Yamagishi, 2011*)
- To overcome these issues – **forced-choice framework methodology**

# Q-methodology

Origin and aims	William Stephenson (Physicist and Psychologist), 1935 'Objective analysis of subjective concepts'
Mixed Methodology using factor analysis	'By person' factor analysis of ranked statements Factors represent common (unconscious) conceptualisations on topic Interpreted alongside free text responses
Reasoning	<b>Inductive reasoning</b> to build factor profiles with <b>iterative interpretation</b> from participant comments
Paradigm	<b>Not tied to specific paradigm</b> Used <b>constructivist grounded theory approach</b> here
Application in Medical Education	Professional identity, curriculum design, attitudes to teaching and learning



Statements are sorted on a scaled pyramid (Q-grid)



# Links to Japanese ontological ideas

- Factors extracted by Qmethodology represent **'operant subjectivity'** i.e. capture the **participants own view as it exists amongst all the interconnections** without external interference
- **Watsuji's ideas of 'dialectical unity'** and **Nishida's 'dialectical universal'** parallel the ideas of **Niels Bohr of 'Complementarity'** – **reconciling the dualism to produce something greater than the sum of its parts**
- **Nishida's ideas of 'Absolute Nothingness'** overlap with 19<sup>th</sup> century psychologist **William James** who shared the same view of **consciousness as field**, **'pure experience'** (*James, 1904*). Inspiration to William Stephenson

# Qmethodology as a measurement tool for Japanese viewpoints

- **Qmethodology is the connecting bridge**
- Supports an interconnected worldview
- Tolerates dualism
- Supports principles of complementarity
- These connections uniquely qualify Qmethodology as a measurement tool for Japanese viewpoints

# Methods

- 35 statements describing **attributes of generalist and specialist careers** were generated from a literature review, translated and back translated
- Participants self-identified generalists and specialists
- Recruited via the Japan Primary Care Association mailing list
- Statements sorted by alignment with their own speciality (part 1) and then re-sorted according to their perception of the other speciality (part 2)
- Part 1: **Generalist** → **Generalist**, **Specialist** → **Specialist**
- Part 2: **Generalist** → **Specialist**, **Specialist** → **Generalist**



# Factor analysis

- Factor analysis using varimax rotation was carried out using KenQ (version 1.0.6), with flagging of factors loading at  $p < 0.05$
- Follow-up survey responses supported the interpretation of extracted factors
- Ethics approval obtained from Imperial College London (1920-022) and Fukushima Medical University (2019-282)

# Example statements (total 35)

## Leadership:

医学界のリーダーになる機会がある

There is opportunity to be a leader

## Research

### opportunities:

研究に参加する機会がある

There are opportunities to participate in research

## Status:

患者と一般の人の目には地位があるように見える

There is status in the eyes of patients and lay people

## Role model visibility:

手本となる上級医が数多くいる

There are many visible role models

## Work-life balance

家族との時間を犠牲にする必要がある

There is a good work-life balance

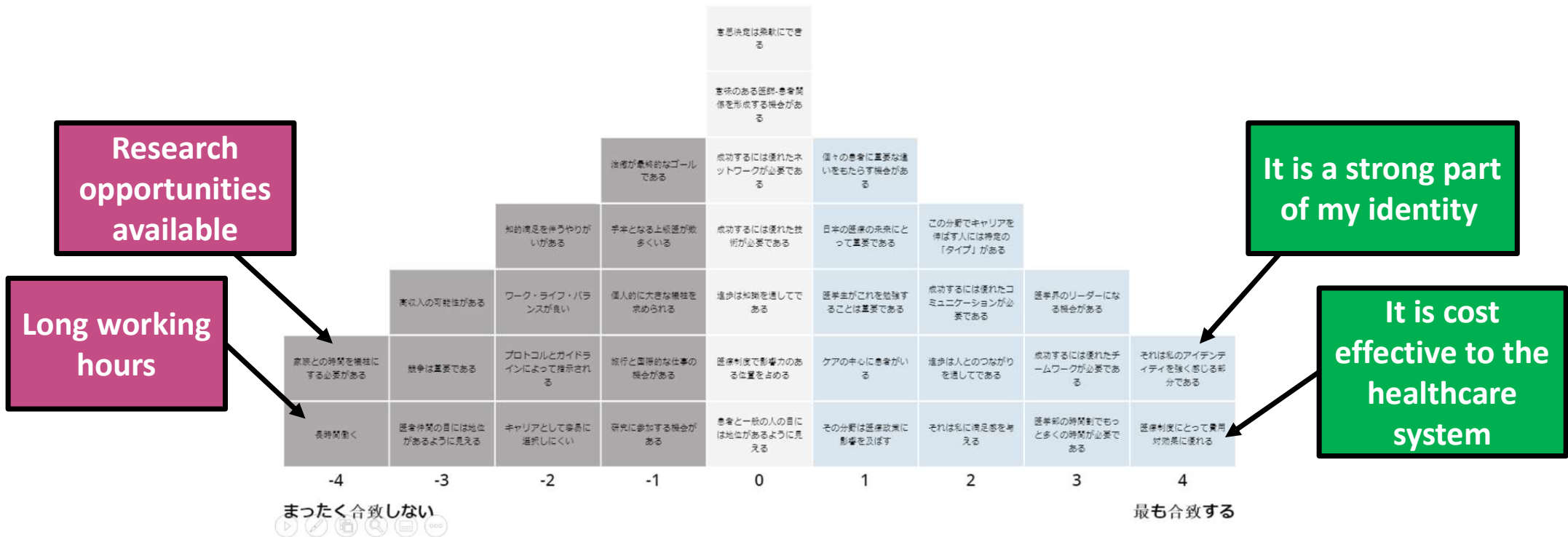
## Doctor-patient

### relationship quality:

意味のある医師-患者関係を形成する機会がある

There is the opportunity to form meaningful doctor-patient relationships

# An example of a completed Q-grid



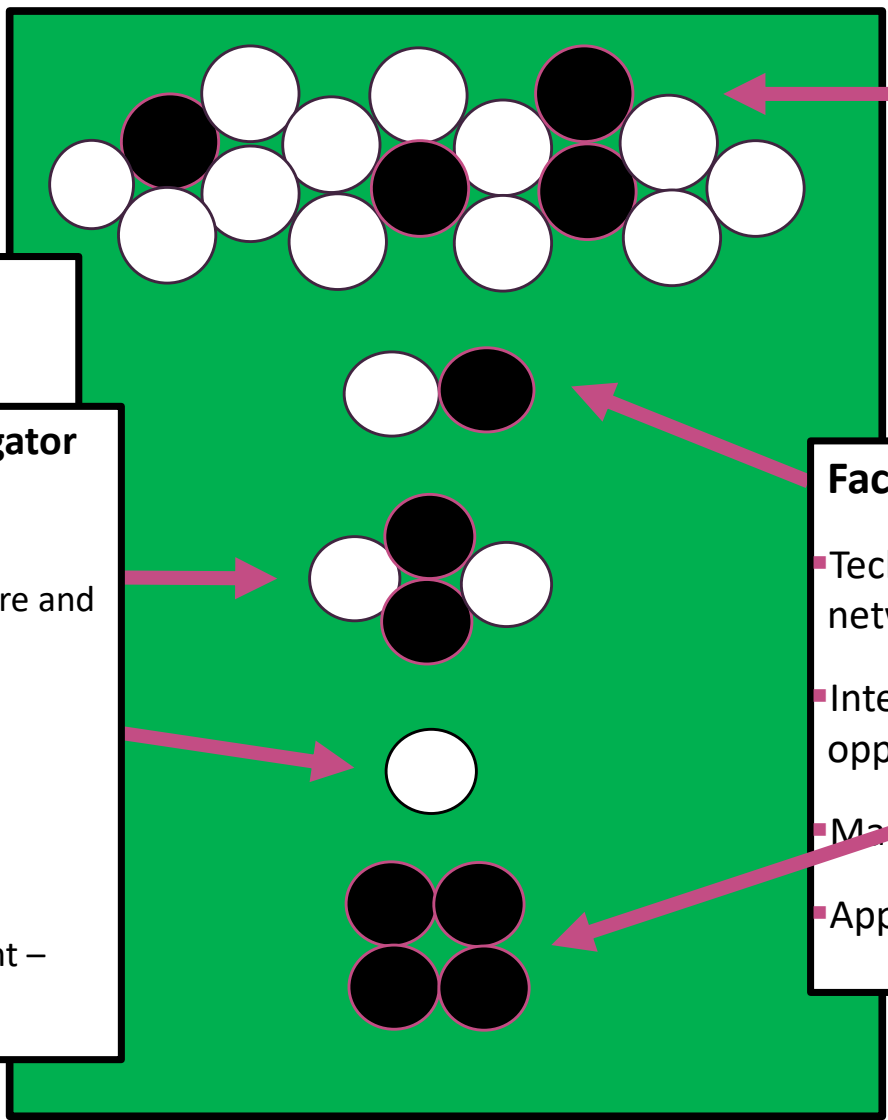
# Results: Participant demographics

Category	Item	Generalist 24		Specialist 14	
		No	%	No	%
Age	25-34	6	25	1	7
	35-44	6	25	2	14
	45-54	7	29	5	36
	55-64	5	21	5	36
	65 and above	0	0	1	7
Gender	Male	21	88	13	93
	Female	3	13	1	7
Years since qualification	0-9	7	29	1	7
	10-19	7	29	2	14
	20-29	8	33	5	36
	30-39	2	8	5	36
	40 and above	0	0	1	7
Workplace	Community clinic (single practitioner)	3	13	2	14
	Community clinic (group practice)	6	25	0	0
	Small hospital (<200 beds)	6	25	1	7
	Big hospital (>200 beds)	4	17	5	36
	University hospital	4	17	6	43
	Other	1	4	0	0
Specialty (only if specialist)	Haematology/Oncology			1	7
	Paediatric infectious diseases			1	7
	Ophthalmology			1	7
	Respiratory Medicine			2	14
	Rheumatology			1	7
	Obstetrics and Gynaecology			1	7
	Cardiology			1	7
	General Internal Medicine			1	7
	Radiology			2	14
	Nephrology			1	7
	Infectious disease			1	7
	Did not disclose			1	7

- A total of 24 generalists and 14 specialists participated
- Generalists made up 63.1% of the participant population
- The percentage of female participants was 11%
- 11 Specialist fields were represented
- Noted difficulty with self identification between generalist and specialist



Part 1: Own speciality  
 5 factor solution accepted



**Factor 3: The Selfless Clinician**

- Heavy personal sacrifice (time with family)

**Factor 4: The Healthcare Navigator**

- Makes a difference to patients
- A networked approach to healthcare and professional development
- Strong part of identity
- Long working hours
- Reduced work-life satisfaction
- Medical school study less important – skills learnt on the job

**Factor 1: The Caring Team Player**

- Focus on patient care and meaningful doctor-patient relationships
- Area of practice necessitates good teamworking and communication skills
- It provides intellectual challenge and has a greater work-life balance and satisfaction

**Factor 2: The Diagnostician**

- Technical network
- Intellectual opportunities
- Management
- Application

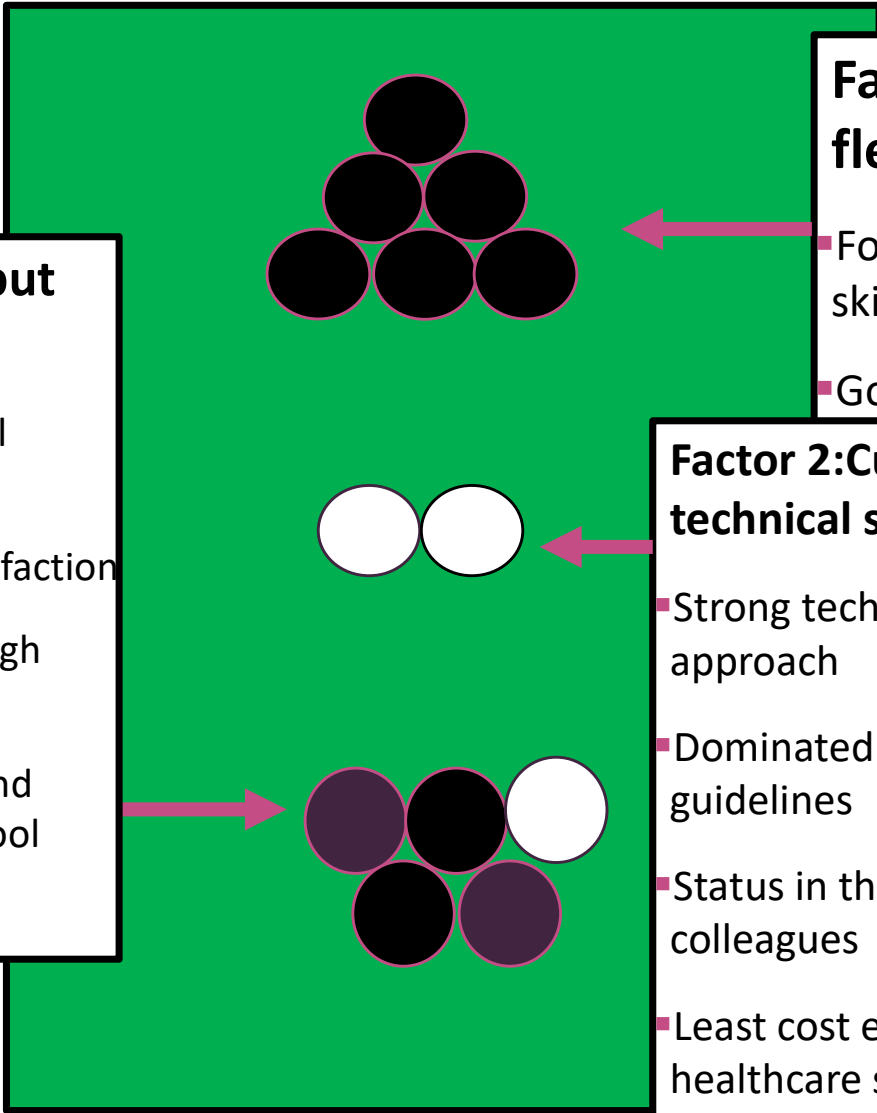
**Factor 5: The Respected Clinical Academic**

- More opportunities for research and international work
- Leadership opportunities
- Status in the eyes of lay public and colleagues
- Least associated with good communication or team working skills
- All identified as specialists in this factor

Part 2: Other speciality  
3 factor solution accepted

**Factor 3: Cost effective but lacking exposure**

- Makes a difference to individual patients through care provision
- Strong part of identity and satisfaction
- Not associated with status or high income
- Lacking in visible role models and curriculum time at medical school



**Factor 1: Patient-centred flexible care**

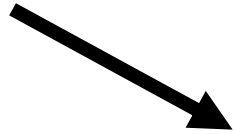
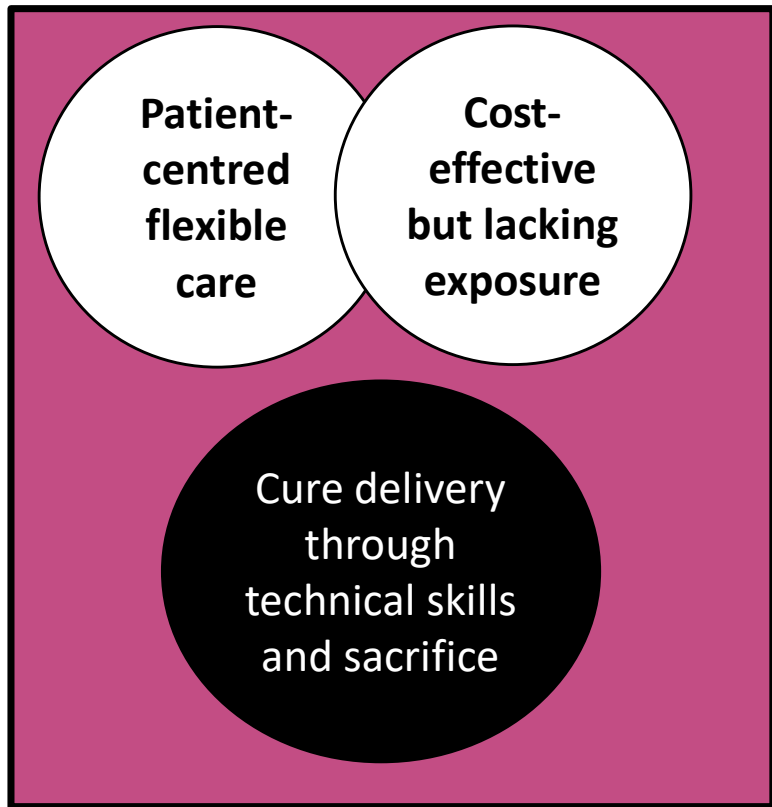
- Focus on patient care, teamworking skills and flexible decision making
- Good work-life balance

other  
academic

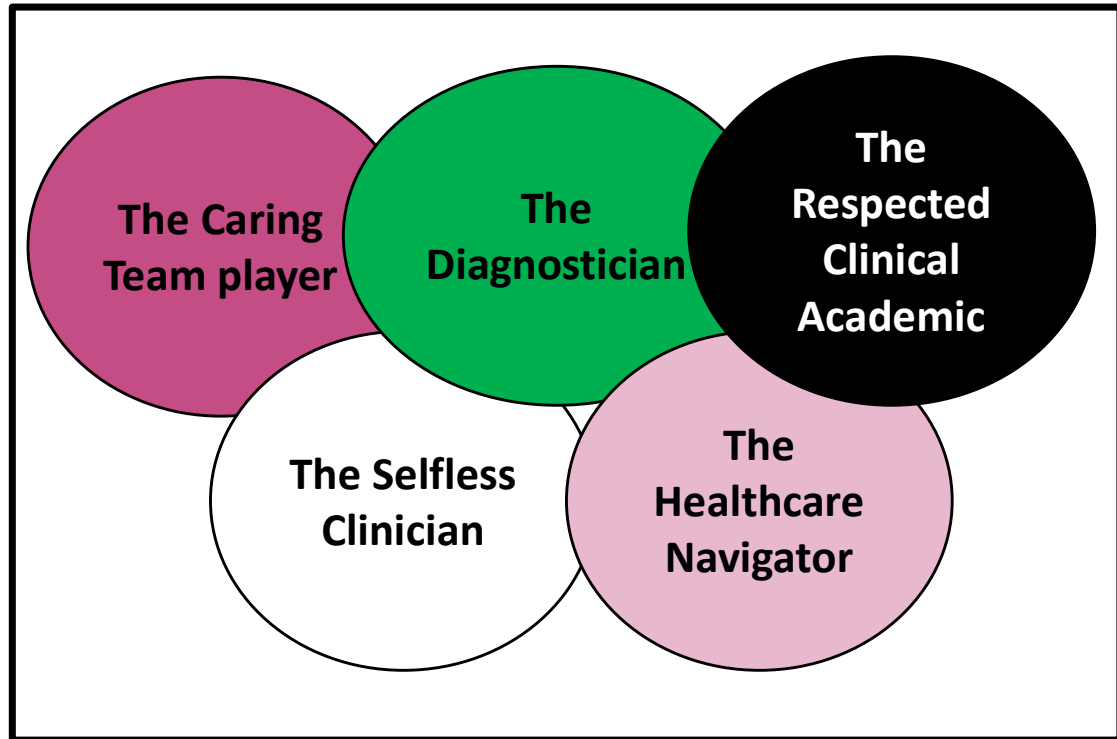
**Factor 2: Cure delivery through technical skills and sacrifice**

- Strong technical skills, curative approach
- Dominated by protocols and guidelines
- Status in the eyes of lay public and colleagues
- Least cost effective to the healthcare system

**Perceptions of generalist and specialist careers**



**Lived reality of generalist and specialist careers**



# Discussion

- This study reveals 'generalism' and 'specialism' as **culturally constructed labels**
- Uncovers the '**shared illusion**' of a **Western style divide** in Japanese medical practice, obscuring the reality of socially defined niches
- No comment on the quality of care delivered within the emergent factors
- Implications for identity development and working practice



# Implications for Japanese practice: A social niche approach

- Japanese society has been modelled by Yamagishi et al through the **'social niche approach'**
- A social niche is *'stable set of constraints and incentives collectively created and maintained by individuals'* (Yamagishi, 2011)
- Individuals base their behaviour on expected behaviour by others, which constitutes reality for other individuals also anticipating and adjusting behaviour

Therefore,

- Perceived reality becomes a **collectively shared reality** – providing a mechanism for **Yoshimoto's 'shared illusion'**
- It is **incentive driven** – whilst there are benefits from the illusion it will be maintained
- Such an effect is only noticeable in the experimental setting of a **social vacuum** – something with **Qmethodology provides**  
*(Yamagishi, 2011)*

# Implications for Japanese practice: The shared illusion

## **Positives (legitimising the shared illusion):**

- Japanese physicians become de facto members of the generalist and specialist groups internationally
- increased power/opportunities outside Japan, access to networks, provide a framework for articulating identity

## **Negatives (undermining the shared illusion but not enough to break it):**

- Association with international speciality divisions may inherit stigma
- Prevent the formation for organic identities developing within own cultural context – **incomplete identity formation when difficulties negotiating shared illusion with reality of working practice**

# Strengths and limitations

## Strengths

- The rigour in methodological grounding to examine a Japanese context authentically using emic philosophical constructs
- Validated methodological design using Q-methodology to examine experienced and perceived divisions of specialities
- The support of qualitative data and an iterative approach to building the factor profiles

## Limitations

- Use of JPCA mailing list to recruit participants
  - Limited generalisability outside of participant group
  - International experience not controlled for – those working and training abroad may have internalised Western perspectives
  - Reading of key Japanese philosophical texts through translation
  - Statements may not represent all aspects attributed to generalist/specialist careers
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# International value

## Fallacy of universal applicability of 'generalist' and 'specialist' as terms

Opportunity for deconstructing these labels and re-evaluating the meaning in other medical education systems

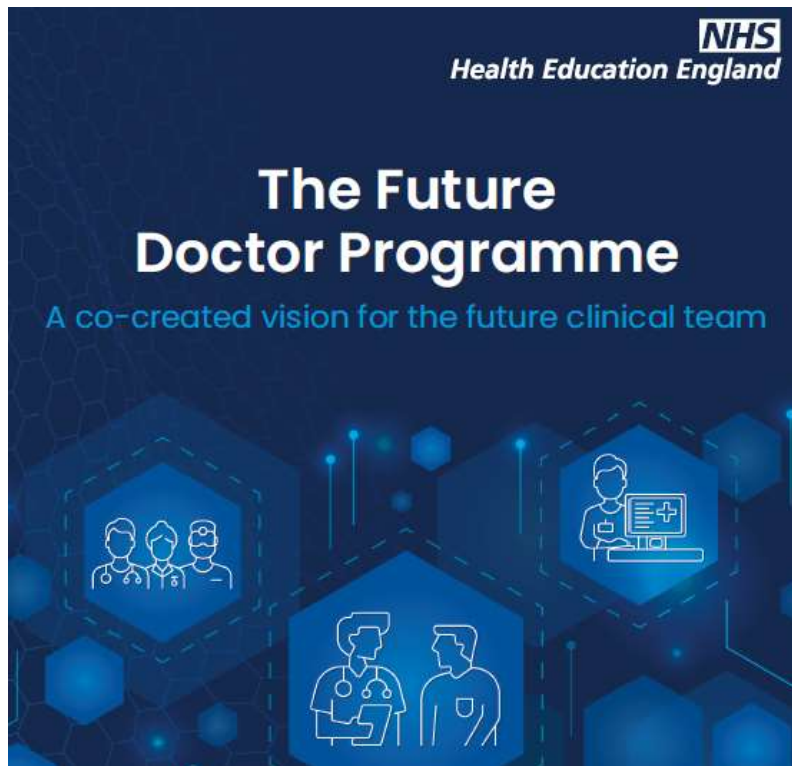
***“Only in seeing the limitations in other cultural contexts can be recognise our own”***

# Benefits for the UK and global learning

- 1. Opportunity for **decolonisation beyond the symbolic** – actively modify how these terms are used in practice/international academic papers
- 2. Rethinking medical practice through **new models** – social niche model aligns with latest opinions in optimising healthcare delivery
- 3. Promoting the **legitimisation of knowledge** gained through paradigms **supporting non-Western ontological perspectives**

**Embracing endemic philosophies can generate new perspectives for global learning**

# Alignment with current Western thinking



FDP domains for UK future doctors	Medical social niches identified
Applied wisdom	The Diagnostician
The Patient Advocate	The Selfless Clinician
The Academic through Clinical Training	The Respected Clinical Academic
The Extensivist and Generalist	The Healthcare Navigator
The Translator of Knowledge	The Caring Team Player
The Leader	The Diagnostician/The Respected Clinical Academic



# In this lecture...

Focus on 3 areas of interest arising from my MEd:

- ✓ **1. Limitations of western philosophical paradigms** when applied to the Japanese context and the impact on results
- ✓ **2. How an external cultural perspective** led to beneficial methodology adaptations
- ✓ **3. How culturally specific research** can deliver results of international value

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Thank you for your  
attention

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# Factor analysis was performed on all solutions up to 7 factors

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Consecutive solutions extracting up to 7 factors for both parts were calculated and analysed to identify those most suitable for retention.

Solutions were evaluated against the following criteria:

- Percentage variance explained (aiming for greater than 40%)
- Number of eigenvalues greater than 1 (termed the Kaiser-Guttman criterion)
- Number of non-significant and confounded Q-sorts (Q-sorts that do not load onto any of the extracted factors and those loading on more than one factor respectively)
- Number of factors with more than 2 Q-sorts loading on them, with significant factor loading for Q-sorts calculated as  $2.58 * (1/\sqrt{\text{number of statements}}) = 0.44$ , where  $(1/\sqrt{\text{number of statements}})$  is equal to the standard error.
- Number of factors containing Q-sort loadings where the cross-product of the two greatest loadings was greater than the standard error, known as Humphrey's rule.