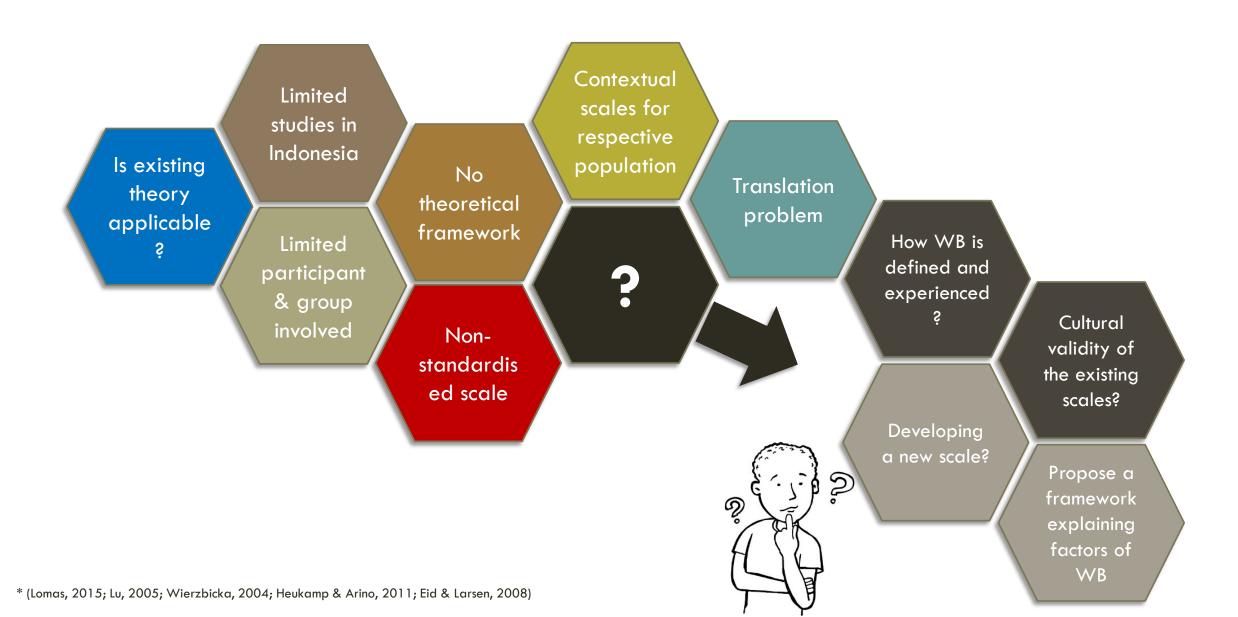
MEASURING WELLBEING IN INDONESIA

The Indonesian Wellbeing Scale and its application in Jayapura Dr Herdiyan Maulana Dr Kate Sollis

WELLBEING INSTRUMENTS IN NON-WESTERN NATIONS

Scale	Research (Year)	Number of items	Place	
Chinese Happiness Index	(Lin, Huang, & Chen, 2016; Lu & Hu,	47 Items (Original	Chinese	
(CHI)	2005; Lu & Shih, 1997)	version)		
		20 Items (Short version)		
Inner Wellbeing	(Samuels & Stavropoulou, 2016;	32 items (4 items per	India and Zambia	
Questionnaire (IWB-Q)	White, Fernandez, & Jha, 2016;	domain)		
	White et al., 2014)			
Pacific Identity and	(Manuela & Sibley, 2013); Manuela	31 Items	New Zealand and Pacific	
Wellbeing Scale (PIWBS)	and Sibley (201 <i>5</i>)		Island Nations	
Korean – Community	(Kim & Lee, 2014)	(On process)	Korea	
Well-being Index (K-CWI)				

Research GAP



Study 1

• How do Indonesians perceive and experience well-being

What initial aspects may be relevant to well-being

Study 2

Examine existing well-being instruments to see if they are culturally appropriate for use in the Indonesian social-cultural context

Phase 2

Study 3

- Explore the psychometric properties of the new developed instrument
- Apply a systematic quantitative procedure to ensure satisfactory psychometric standards



RESEARCH METHOD AND DESIGN (PHASE 1)

Study 1

- \diamond Participants with varied socio-economic backgrounds (N = 30)
- ❖ Indonesian adults (19-54 year olds) (Mean: 26.6; SD=8.14)
- Qualitative thematic analysis (Braun and Clarke, 2006)
- Nvivo 11 for organising the raw data and underlying themes
- Triangulation using Inter-rater bilingual expert
- \diamond Cohen's Kappa analysis showed .759 (p=.000), indicating a good reliability of agreement between two raters.

♦ Study 2

- \diamond Participants with varied socio-economic backgrounds (N = 30)
- ❖ Indonesian adults (19-54 year olds) (Mean: 26.6; SD=8.14)
- Qualitative content analysis (Hsieh and Shannon, 2005)
- Translation and back-translation process
- Nvivo 11 for organising the raw data and coding (node)
- Triangulation: Two bilingual translators each for translation and back translation process.

RESEARCH METHOD AND DESIGN (PHASE 2)

Study 3

- Preliminary qualitative study to investigate how Indonesians experience their sense of well-being (N = 30) \rightarrow A list of 50 pool of items covering 5 key-themes of well-being established.
- Expert-review on clarity and appropriateness of the items (N = 29) using Aiken's V formula + Internal review of research team \rightarrow A short-list of 33 items finalised
- Using SPSS Version 23 for EFA and SPSS AMOS Version 25 for CFA
- Exploration factor analysis (EFA) (n = 516) to explore the item position to factors
- Horn's parallel analysis (Bootstrapping 5000 respondents), Scree plot test, and reproduced correlation to confirm the result of EFA
- \diamond Confirmatory factor analysis (CFA) (n = 512) to confirm the EFA result
- Test-retest reliability (1 week interval), as well as convergent and divergent validity with SWLS, WEMWBS, & K-10 demonstrated sound psychometric properties.
- Convergent validity using AVE, CR and MSV for all four sub-scales

STUDY 1 FINDINGS



- Income
- Health
- Education
- Transportation

Well-being

Social Relationships

- Family
- Spouse
- Friends
- Neighbourhoods

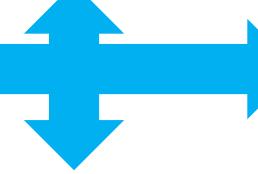
Worldviews

- Spirituality
- Self-Acceptance
- Gratitude

DISCUSSION Study 1 & 2

- Parallels with previous studies*
 - Linguistic contextual biases
 - No exact meaning of the word
 - Different social-cultural context

Existing
Well-being
Instruments



Nature of the problem

- Different socio-cultural context
- Compatibility of the concept
- Linguistic aspects (literal translation)

Problems

- Socio cultural item biases
- Meaning unequivalence

- Contextualise the item according to specific social and situation context
- Applied Indonesian social structure throughout the item questions
- Further revision & testing
- Develop new scale

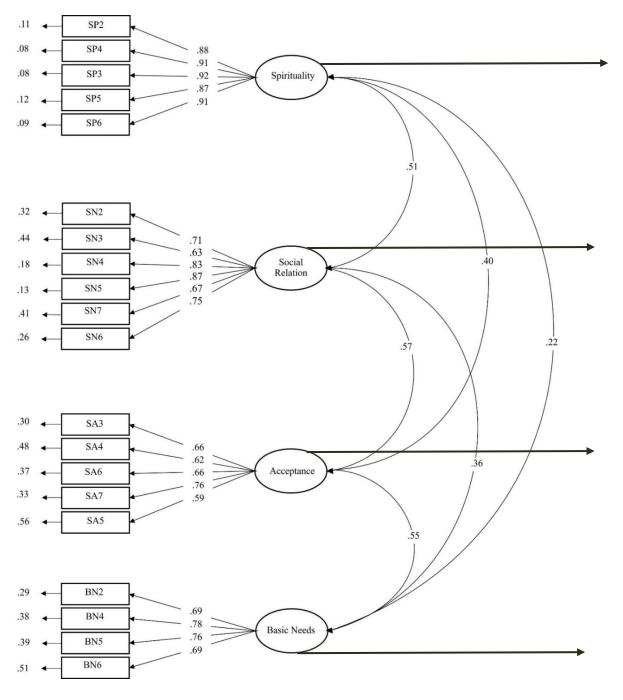
* (Bai, 2011; Athay, 2012; López et al, 2013; Taggart et al , 2013; Waqas et al., 2015)

STUDY 3 FINDINGS

CONFIRMATORY FACTOR ANALYSIS OF INDONESIAN WELL-BEING SCALE (IWS)

Confirmatory factor analysis (CFA) $(n = 512) \rightarrow$ Final 20 Items of 4 factor model fits with the data (CFI = .96; TLI = .96; RMSEA = .05)

	χ^2 (df)	CFI	TLI	sRMR	IFI	RMSEA
Four factors with 24 items	799.4 (246)	.92	.91	.03	.92	.06
Four factors with 20 items	375.4 (164)	.96	.96	.02	.96	.05
One factor with 20 items	2766.48 (170)	.57	.52	.12	.57	.17



Evaluates the extent to which religious practice and belief in God enable people to attain positive well-being. A high score on this component indicates satisfaction with their sense of spirituality

Satisfaction with social interaction with significant others (e.g. family, neighbours). A high score on this factor indicates a high level of satisfaction and reciprocity in their relations with family and community

Personal attitude to unconditionally accept life circumstance. High scores on this factor indicate a higher level of acceptance

Evaluation of capacity to afford daily life necessities. A high score on this factor indicates a person's subjective feeling of being able to afford their primary needs as well as the needs of their significant others

DISCUSSION Study 3

Covers both common as well as culturally-specific components of psychological features of Indonesian

Indonesian Well-being Scale (IWS)

Self-Acceptance

Basic needs

Social relations

Spirituality

4

Komplit



Complete

Culturally driven data that parallel with previous findings in Indonesia

(French et al., 2013; Rahayu, 2016; Yuniarti, 2006)



Analysing the migrant wellbeing gap in Jayapura using the IWS

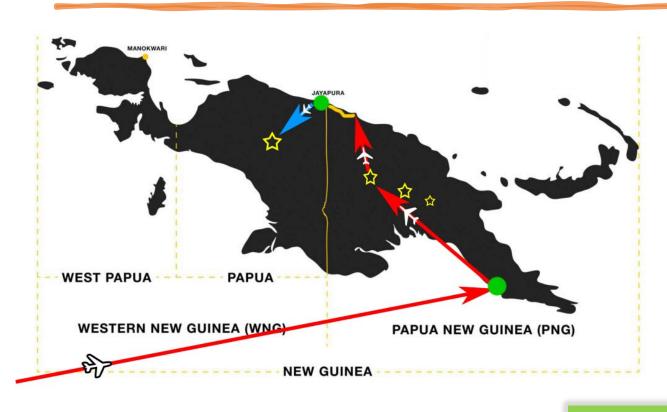
Kate Sollis, Budy P. Resosudarmo, Firman Witoelar, Riswandi Riswandi & Julius A. Mollet

Indonesia Study Group 8th November 2023



Motivation, background, and methodology

Focus of study



Aim: To examine the migrant wellbeing gap in Jayapura

> Indonesian Well-being Scale (IWS)

Self-Acceptance

Basic needs

Social relations

Spirituality

Motivation for study

- Investigate the value of applying context-specific measurement tools such as the IWS
- Little research on the migrant wellbeing gap outside Europe and other Western countries
- Small number of studies examining outcomes of internal migrants in Indonesia (Lu 2008, 2010a, 2010b; Seda et al., 2018)
 - None focusing on Papua and none using a context-specific measurement tool
- High levels of conflict and unrest may exacerbate wellbeing differences between migrants and non-migrants
- *Transmigrasi* policy makes Indonesia, and Papua specifically, a unique context to examine the migrant wellbeing gap



Key research questions

Does a wellbeing gap exist between migrants and non-migrants in Jayapura?

If a wellbeing gap exists, are there certain population groups driving the difference?

If a wellbeing gap exists, are there certain dimensions of wellbeing driving the difference?

Survey details

- Secondary data from a household survey undertaken in Jayapura regency
- Data collected in January 2020
- Purpose of primary data collection: To understand the long-term health, educational, and wellbeing impacts of contracting malaria as a child
- Stratified random sampling technique
- Total sample size: 298 households, 694 respondents



Outcome variables

Primary outcome variable

Indonesian Wellbeing Scale

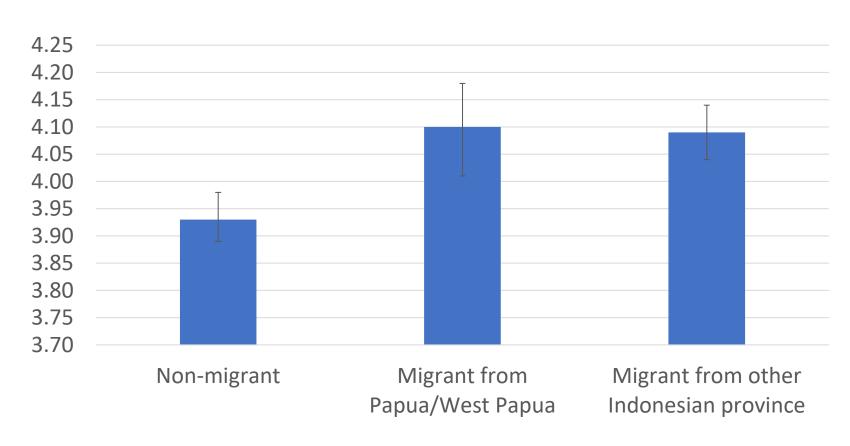
Secondary outcome variables

- Life satisfaction scale "Please think about your life as a whole. How satisfied are you with it?"
- Happiness scale "Taking all things together, how would you say things are these days?"





IWS score by migrant status



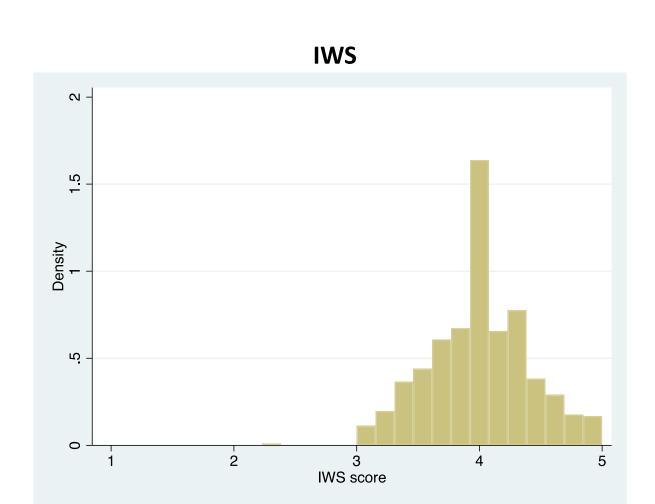
Note: Error bars show 95% confidence intervals

OLS models: IWS, life satisfaction and happiness

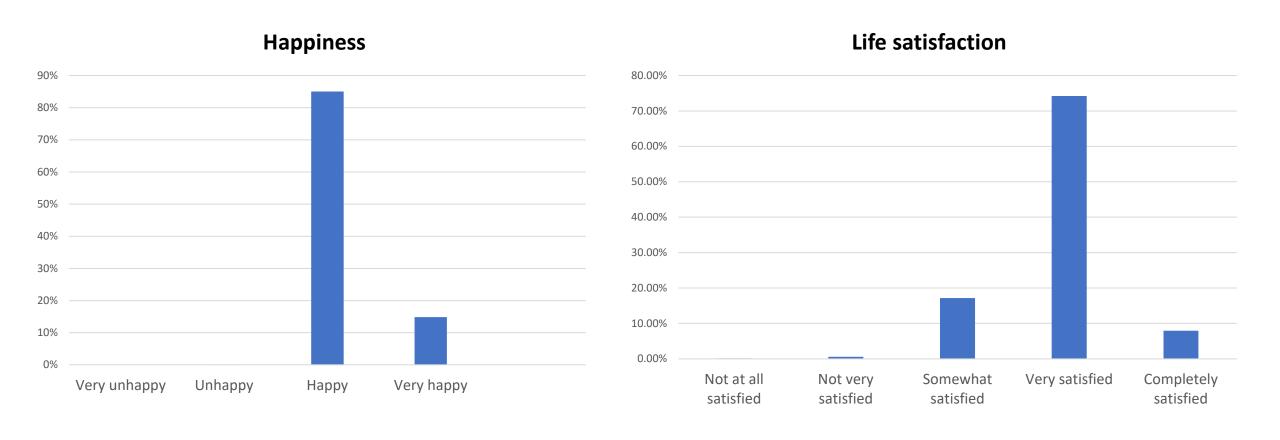
	IWS		Life Satis	sfaction	Happiness		
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	
Non-migrant (base case)							
Migrant from Papua/West Papua	0.082*	0.042	-0.036	0.294	-0.17	0.368	
Migrant from other Indonesian province	0.109***	0.035	-0.321	0.242	-0.457	0.328	
Controls:							
Gender, religion, village, marital status, age, BMI, education level, salary, owns land, house size, housing quality							

^{***} Significant at 1% level ** Significant at 5% level * Significant at 10% level

Distributions of outcome variables...



Distributions of outcome variables...



OLS models: Identifying drivers of wellbeing gap (IWS)

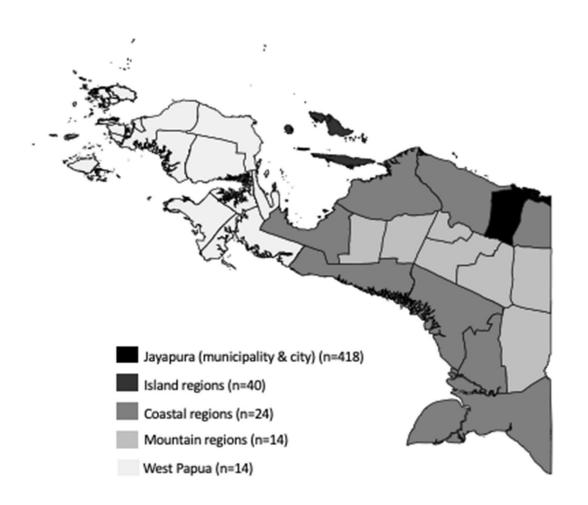
	Province	of origin	Age of migration		
	Coeff.	Std. Error	Coeff.	Std. Error	
Non-migrant (base case)					
Migrant from Papua/West Papua	0.081*	0.042			
Migrant from other Indonesian province					
(Java)	0.092*	0.05			
(Lesser Sunda Islands)	0.05	0.094			
(Sumatra)	-0.033	0.124			
(Kalimantan)	0.272	0.201			
(Sulawesi)	0.156***	0.048			
(Maluku)	0.089	0.087			
Born in Jayapura			-0.076***	0.034	
Migrated after 12 years old			0.064	0.046	

Controls:

Gender, religion, village, marital status, age, BMI, education level, salary, owns land, house size, housing quality

^{***} Significant at 1% level ** Significant at 5% level * Significant at 10% level

OLS models: IWS results for migrants from Papua/West Papua



	IWS						
	Coeff.	Std. Error					
Non-migrant (base case)							
Migrant from island regions	0.016	0.059					
Migrant from coastal regions	0.06	0.076					
Migrant from mountain regions	0.191***	0.097					
Migrant from West Papua	0.129	0.094					
Controls:							

Controls:

Gender, religion, village, marital status, age, BMI, education level, salary, owns land, house size, housing quality

^{***} Significant at 1% level ** Significant at 5% level * Significant at 10% level

OLS models: IWS sub-scales

	Spirituality		Social R	cial Relations Ba		Basic Needs		Self-Acceptance	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	
Non-migrant (base case)									
Migrant from Papua/West Papua	0.132**	0.063	0.021	0.057	0.05	0.067	0.123***	0.052	
Migrant from other Indonesian province	0.104**	0.052	0.1**	0.047	0.112***	0.056	0.121***	0.043	

Controls:

Gender, religion, village, marital status, age, BMI, education level, salary, owns land, house size, housing quality

^{***} Significant at 1% level ** Significant at 5% level * Significant at 10% level

Summary of key findings

Migrants have significantly higher wellbeing than non-migrants, even after controlling for a number of socio-demographic variables (according to IWS)

Happiness and Life Satisfaction scales showed no such difference – potentially due to being global, uni-dimensional scales

Higher wellbeing of migrants from outside Papua/West Papua driven by those from Sulawesi and Java (although sample size may be an issue here)

Higher wellbeing of migrants from inside Papua/West Papua driven by those from mountain regions

No difference based on what age individuals migrated

Wellbeing gap evident across all four wellbeing dimensions

A few limitations...



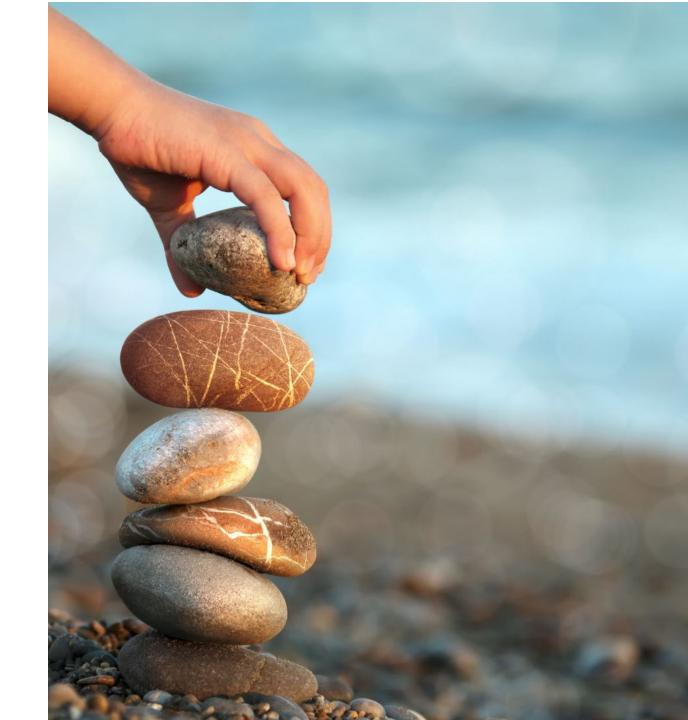
A few limitations

- Limited variables on migration
- Lack of causal inference
- Limited consultation with individuals in Papua in development of IWS

Discussion & key takeaways

1. Why the wellbeing gap?

- Happy migrant hypothesis?
- 'Exporting' higher wellbeing from other provinces
 - Wellbeing of individuals in Papua substantially lower than most other provinces (Sujarwoto, 2021)
 - However, migrants from mountain regions in Papua also had higher wellbeing...
- Unexpected finding regarding social relations
- Migrant wellbeing improved as a result of migration process?



2. Implications for policy in Indonesia

- Potential social impacts of *Transmigrasi*
- A continuous cycle of wellbeing inequality
- Potential policy levers:
 - Providing greater educational opportunities to non-migrants
 - Implementing policies to improve social cohesion amongst non-migrants
 - Strengthening affirmative action policy



3. High value in using a context-specific wellbeing scale

Greater sensitivity



Multidimensionality



Measuring what matters

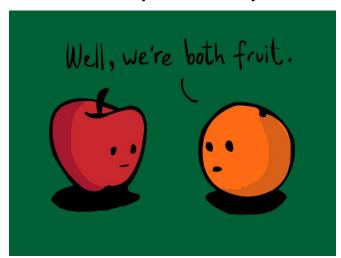


4. But challenges exist...

Scalability



Comparability



Bias toward global measurement tools



So where to from here?



carefully about the wellbeing measurement tool you use

Research

as much as resources allow

- Review literature on wellbeing
- Engage and discuss with research partners
- Conduct participatory research



the most relevant tool for the available resources

More information



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Ada Pertanyaan