Measuring Women's Agency in Family Planning Research: A Call to Transform Paradigms

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Objectives

- Outline principles for measuring abstract constructs, like women's agency
- O Describe, critique research on women's general agency, contraceptive use
- Present adapted definition of women's multidimensional agency
- Share approach to develop, validate measures of women's agency
- O Present validated measures of women's general, reproductive agency
- Offer an integrated taxonomy for women's general and SRH agency

Measuring Abstract Constructs

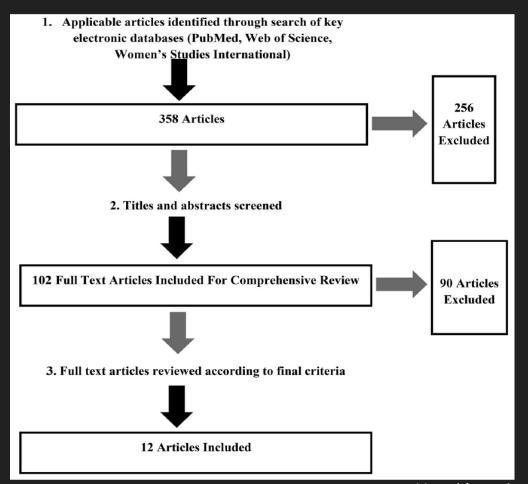


Women's agency and its relationship to current contraceptive use in lower- and middle-income countries: A systematic review of the literature

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Inclusion Criteria

- O Jan. 1980 to Sept. 2014
- English, Spanish peer-reviewed
- O Women 15-49 years
- Low, Middle Income Countries (WB)
- Quantitative or mixed-methods
- Population-based
- Agency defined as FM and/or DM
- 'Modern' (WHO) or specific methods
- Current contraceptive use



Key Findings from Review

Author	Year	Income	Region	Data	STROBE	Framework	Term	Agency	# Items	Measure	C Method	Findings
Ahmed	2010	МС	MC	DHS	L	GEN	EMP	С	5	18	GM	+
Bogale	2011	L	SSA	Р	M	CU	DMP	DM	3	2\$	GM	N,M
Corroon	2014	LM	SSA	OS	Н		EMP	DM,FM	4,4	2L	SM	+,+
Deb	2011	L	SA	DHS	L		EMP	С	7	1S	V	M
Do	2012	МС	MC	DHS	Н	EMP/CU	EMP	DM,FM,C	1,1	2D	SM	M
Dwivedi	2008	LM	SA	DHS	M		AUT	DM,FM	4,2	2S	V	N,N
Govin.	1996	LM	ME	DHS	M	EMP/CU	HHP	DM,FM	1,2	1D,1S	GM	N,+
Gunth.	2008	LM	SA	DHS	L		AUT	С	6	1S	V	M
Hindin	2000	L	SSA	DHS	L	EMP/CU	AUT	DM	3	1D	GM	Ν
Hogan	1999	L	SSA	OS	M	CU	AUT	DM	5	1PCA	V	M
Jejeebhoy	2002	LM	SA	OS	Н	EMP	AUT	DM,FM	3,5	2S	V	N,N
Mahmood	1996	LM	SA	DHS	M	EMP/CU	AUT	FM	1	1D	V	+

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Measures of Women's SRH Agency

Name	Focus on agency in:	# Factors	# Items	CI	ER	α	Load	CV	PV	TR	REP
Sexual Pressure Scale SPS (1)	sexual activity	5	19	Χ	Χ	.6382	≥.50	Χ	Χ		
SPSW-R (2)	sexual activity	4	18			.7685 .7688	≥.55 ≥.38	X	X 		(X)
Sexual Assertiveness Scale (3)	sexual activity	3	18			.7882 .7685		X		X	(X)
Sexual Relationship Power Scale (4)	HIV-risk, condom use	2	23	Χ	Χ	.6385	≥.30	Χ	Χ		Χ
SRPS-M (5)	HIV-risk	2	19	Χ	Χ	.5785	≥.30	Χ	Χ		Χ
Repro Autonomy Scale (6)	preventing pregnancy	3	14	Χ	Χ	. <mark>65</mark> 82	≥.63		Χ		
Repro Empowerment Scale (7)	using contraception	5	20			.87	ś		Χ		
SR Empowerment Scale (8)	adolescent SRH	7	23	Χ	Χ	.7184	≥.54	Χ	Χ		
Pregnancy-Related Emp Scale (9)	pregnancy	4	16	Χ	Χ	.94	≥.42				Χ
Emp. Scale for Pregnant Women (10)	pregnancy	5	27	Χ	Χ	.6780	≥.34	Χ			

⁽¹⁾ Jones 2006; (2) Jones (2009); (3) Morokoff et al. 1997; (4) Pulerwitz et al. (2000); (5) Pulerwitz et al. (2002); (6) Upadhyay et al. (2014); (7) Mandal et al. 2020; (8) Upadhyay et al. (2020); (9) Klima (2015); (10) Kameda et al. (2008)

Importance of Replication

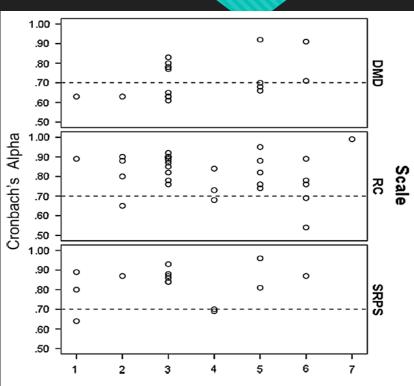


Fig. 1 Distribution of reported Cronbach's alpha by population and scale. 1=US African American females; 2 = US Latina females; 3=US multiple-race/ethnicity females; 4=South African females; 5=International female samples/other; 6=males; 7=heterosexual couples

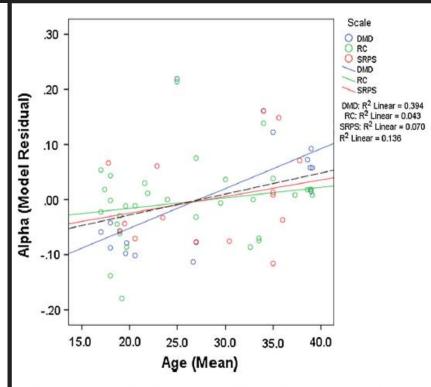


Fig. 2 Scatter plot of relationship between mean sample age and alpha, after adjusting for population type, number of items per scale, and scale modifications

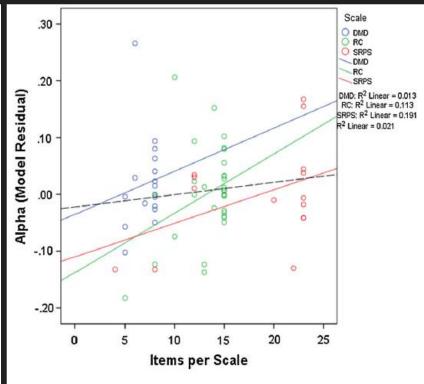


Fig. 3 Scatter plot of relationship between number of items per scale and alpha, after adjusting for population type, mean age of sample, and scale modifications

Implications

We lack a comprehensive measure of women's sexual and reproductive health agency that is consistently defined, operationalized, and validated across groups, contexts, and time

Women's Empowerment: Agency

- O Process of conscientization whereby women—individually and collectively become aware of and act to overcome their disempowerment. Three dimensions:
- Intrinsic agency (state of mind): awareness of rights and aspirations, confidence in capabilities, internal motivation to act
- Instrumental agency (strategic action): exercising voice, influencing decisions, moving freely in historically restricted spaces
- Collective agency (connection, joint efficacy, joint action): engaging in, leading groups, networks with shared goals; confidence in group's, network's ability to act jointly; joint action in pursuit of shared goals to affect change

Sequential, Mixed-Methods Process to Develop Women's Agency Scales

Qualitative Research

Questionnaire Review

> Item Pool

Expert Review

Psychometric Validation

Pilot Survey

Form Pretesting

Cognitive Testing

Replication (group, context, time)

Comparable Scale
Contextual Items

Skipping Steps may compromise the scale

Yount et al. 2020

Steps in Psychometric Validation

Univariate Analysis

IRT Analysis to Assess Item, Scale Precision

Valid Short-form Creation

Bivariate Analysis

Measurement
Invariance Analysis
across Groups

EFA in Random Split Sample 1

CFA in Random Split Sample 2

Women's Agency Scale 61 (WAS-61)

Dimension	# factors	# items per factor	CFA Loadings	RMSEA (95%CI)	CFI	TLI
Intrinsic: awareness of gender rights, confidence in voice, confidence in movement outside home	3	29 (9, 14, 6)	F1: .5481 F2: .3582 F3: .8793	.04 (.04, .05)	.94	.93
Instrumental: use of financial services, frequency of voice w/husband, frequency of voice/mvmt outside home	3	17 (5, 3, 9)	F1: .5795 F2: .4899 F3: .4379	.05 (.04, .06)	.94	.93
Collective: Leadership of others, influence in community	2	14 (7, 7)	.5284 .5483	.10 (.08, .12) .10 (.08, .12)	.97 .96	.96 .95

Reproductive Agency Scale 17 (RAS-17)

Dimension	# items	EFA loadings (n ₁ =342)	CFA loadings (n ₂ =342)
Intrinsic: awareness of economic rights	5	.4081	.4484
Instrumental: influence in personal, family decisions	5	.3288	.4796
Instrumental: freedom of movement	7	.4784	.5083
RMSEA CFI TLI		.06 .95 .93	.06 .95 .95

Scale partially
measurement
invariant across Qatari
and non-Qatari Arab
women

Women's General & SRH-Specific Agency

	Women's General Agency	Women's SRH* Agency
Intrinsic (state of mind)	 awareness of rights, aspirations confidence in capabilities internal motivation to pursue rts, aspirations 	 awareness of SRH rights, aspirations confidence in SRH capabilities internal motivation to pursue SRH rts, aspirations
Instrumental (strategic action)	 exercise voice w/others influence decisions move freely in historically restricted spaces 	 exercise voice w/others on SRH influence decisions on SRH move freely in historically restricted spaces to access SRH services
Collective (connection, joint efficacy / action)	 engage in, lead groups, networks with shared goals confidence in group's, network's ability to act on shared goals joint action in pursuit of shared goals to affect change 	 engage, lead groups, networks with shared SRH goals confidence in group's, network's ability to act on shared SRH goals joint action in pursuit of shared goals to affect SRH change

^{*}Sexual activity, STI/HIV prevention, pregnancy prevention, contraceptive use, pregnancy (adolescent SRH)

Citations and URLs for the WAS-61 and RAS-17

- WAS-61: Yount, Kathryn M. and Khan, Zara and Miedema, Stephanie and Cheong, Yuk Fai and Naved, Ruchira T., The Women's Agency Scale 61 (Was-61): A Comprehensive Measure of Women's Intrinsic, Instrumental, and Collective Agency (August 9, 2020). Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3670180
- RAS-17: Yount, K. M., James-Hawkins, L., & Rahim, H. F. A. (2020). The Reproductive Agency Scale (RAS-17): development and validation in a cross-sectional study of pregnant Qatari and non-Qatari Arab Women. BMC Pregnancy and Childbirth, 20(1), 1-15. https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-020-03205-2

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EXTRA SLIDES

Women's Empowerment: Claims on Resources

- O Preconditions for women's agency include claims on enabling resources
 - O Human resources: schooling or skills-based training
 - O Economic resources: work, income, property, other assets
 - O Social resources: non-familial networks of solidarity and support
- Claims on resources differs from access to resources

Critique of Women's Agency, FP Use Research

- O Some evidence of association between women's agency and FP use BUT:
 - O Definitions of women's agency are vague and variable
 - O Studies include **selective** dimensions of women's agency
 - Measures of women's agency are varied and not validated
 - Research has geographic gaps, limiting generalization
 - O A valid, general measure of women's multidimensional agency is needed

Measuring Women's General and SRC Agency

- O Generate clear definitions of women's intrinsic, instrumental agency
- Develop item pool (questionnaire review, qualitative research)
- Test item pool with expert reviews and cognitive interviews
- Conduct pilot surveys in 3–4 countries (two waves)
- Validate WSRC Agency Scale across groups, contexts, and time

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Other Scales Developed and Validated

- Attitudes about IPV Scale (ATT-IPV)
- Attitudes about Recourse Scale (ATT-RECOURSE)
- Women's Agency Scale LFPS [WAS-LFPS]
- O Women's Empowerment DHS [WE-DHS]
- Reproductive Agency Scale 17 (RAS-17)
- Economic Coercion Scales (ECS-36; ECS-20)
- Sexual Harassment Scale 22 (SHS-22)
- Grp/Network Collective Agency 23 (GCA-23/NCA-23)
- O Time Agency (TA)

Yount et al. 2016

Yount et al. 2016

Yount et al. 2016

Cheong et al. 2017

Miedema et al. 2018

Yount et al. 2020

Yount et al. 2020

Miedema et al. 2020

Spencer et al. 2020

Yount et al. nd

Sinharoy et al. nd