

# Preference-Aligned Fertility Management: Assessing the Feasibility of a Newly Proposed Measure of Contraceptive Autonomy Among Married Adolescent Girls in Kaduna and Nasarawa States, Nigeria

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Universal access to sexual and reproductive healthcare – including family planning (FP) – is a global priority, yet there is no standard approach to measuring rights-based FP program outcomes. Current FP endpoints focus on contraceptive uptake and use, which may incentivize coercion. We field-tested a newly proposed rights-based FP measure, preference-aligned fertility management (PFM), to assess fulfillment of contraceptive preferences in the context of an adolescent-responsive SRHR program in Nigeria.

## METHODS

**Aims:** To field-test PFM, a measure newly proposed by Holt et al.<sup>1</sup> which is defined as concordance between current self-reported desire to use contraception and current contraceptive use. We fielded a simplified version of the measure, which assessed concordance between desired and actual use of *any* contraceptive method.

**Study population:** Married adolescent girls aged 15-19 newly initiating modern contraception within 15 public FP clinics in Kaduna and Nasarawa States of Northern Nigeria. Study facilities were supported by Adolescents 360 (A360), a program led by Population Services International which aims to expand contraceptive access through adolescent-responsive programming

**Design:** Prospective cohort study

**Statistical Analysis:** We described the point prevalence of PFM at 3.5 months post-method initiation. We additionally described satisfaction-adjusted PFM, a modified version of PFM which reclassifies all current/sometimes users who report method dissatisfaction as not practicing PFM. We used  $\chi^2$  and Wilcoxon-ranked sum tests to identify contraceptive characteristics correlated with 3.5-month PFM. All analyses are complete case.

## RESULTS

Ninety-six percent (n=1,056/1,103) of participants completed the first follow-up survey at 3.5 months and are included in the analysis. Study participants were primarily 18 (n=396, 38%) or 19 (n=515, 49%) years old and Muslim (85%).

PFM classification (adapted from Holt et al.<sup>1</sup>)

	Desire use	Don't desire use	Don't know/whether desire use
Current use	PFM <sup>1,2</sup>	No PFM	PFM
Current non-use	No PFM	PFM	PFM
Current sometimes use	PFM <sup>1,2</sup>	No PFM	PFM <sup>2</sup>

Notes: Green cells indicate PFM, orange cells no PFM. <sup>1</sup>Report desire to use (any) contraception and current/current sometimes use of any contraception. <sup>2</sup>Report that there are no times that they want to, but cannot, use contraception (without reference to a specific method).

**2** Most of the discordance between desired and actual contraceptive use was observed among girls who were using contraception but did not want to be

	No PFM	PFM	Total
Current/sometimes use	30 (83%)	996 (98%)	1,026 (97%)
Current non-use	6 (17%)	24 (2%)	30 (3%)
Total*	36 (3%)	1,020 (97%)	1,056 (100%)

Notes: \* Percentages in this row are row percentages; all other percentages in the table are column percentages

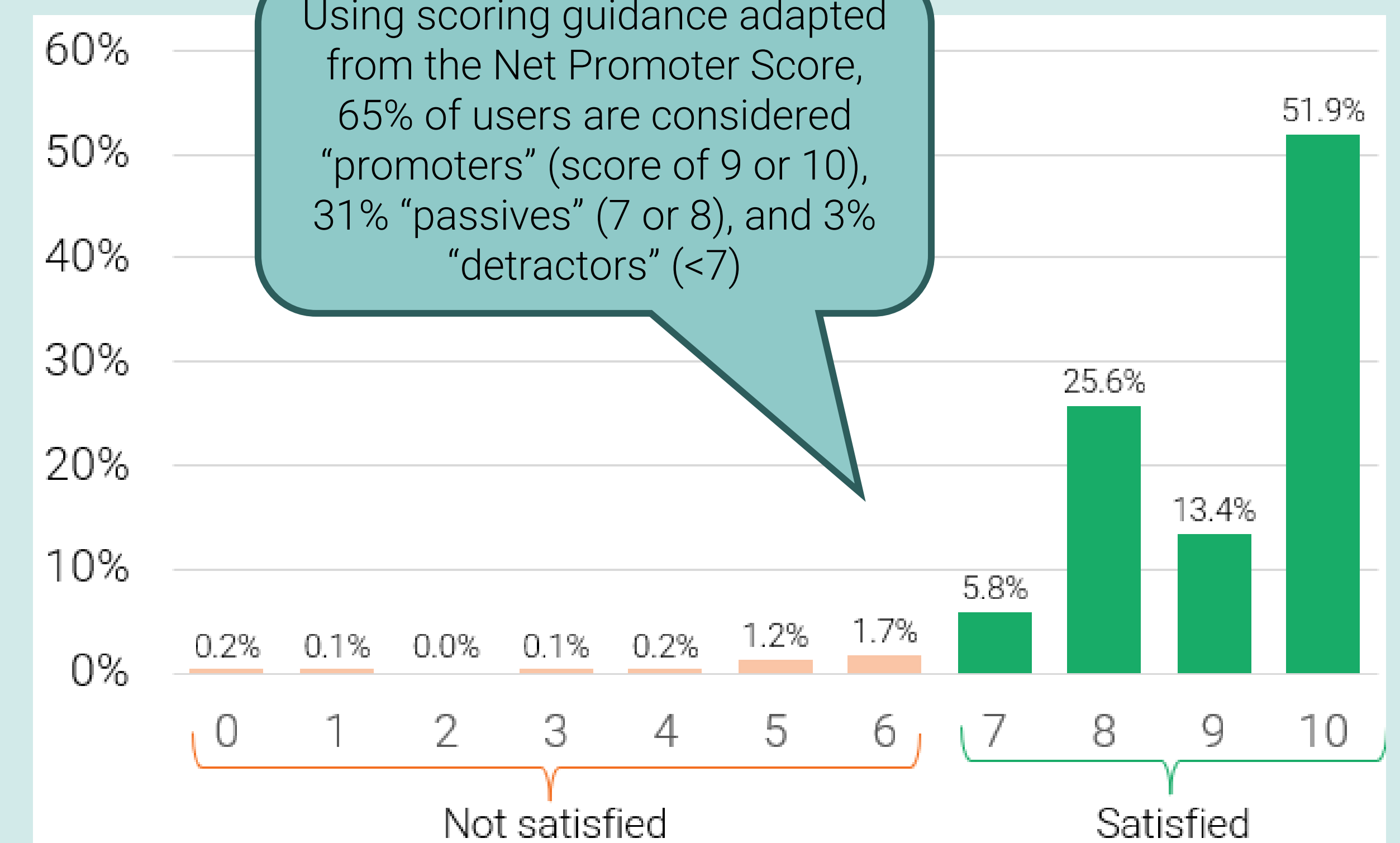
**3** Among participants using contraception at 3.5 months, we observe significant differences in method type by PFM

Girls without PFM reported lower method satisfaction, although this difference was not statistically significant (p=0.052)

Contraceptive Characteristics of Participants Using Contraception at 3.5 Months Post-Initiation <sup>c</sup>	Preference-Aligned Fertility Management (PFM)		p-value
	No n (%)	Yes n (%)	
Method type			
IUD	0 (0)	9 (0.9)	
Implant	10 (33)	200 (20)	
Injectable	16 (53)	620 (62)	
OCPs	1 (3)	152 (15)	<0.001 <sup>a</sup>
ECP	1 (3)	0 (0)	
Male condom	1 (3)	11 (1)	
Female condom	0 (0)	3 (0.3)	
Withdrawal	1 (3)	1 (0.1)	
Use of LARC method	10 (33)	209 (21)	0.104 <sup>a</sup>
Method satisfaction (median, IQR)	8 (8, 10)	10 (8, 10)	0.052 <sup>b</sup>

LARC = long-acting reversible contraceptive (implants and IUD); <sup>a</sup> $\chi^2$  test; <sup>b</sup> Wilcoxon rank-sum test; <sup>c</sup> Among subset of analysis sample who are current or "sometimes" users (30 participants with no PFM, 996 participants with PFM)

**4** One-third of participants still using contraceptive at 3.5 months were not fully satisfied with their current method



Incorporating method satisfaction into the PFM metric to create satisfaction-adjusted PFM resulted in the reclassification of 34 participants from practicing to not practicing PFM, for a total prevalence of 93%.

**1** Ninety-five percent of participants reported currently wanting to use contraception. Among these, nearly all (99%) were currently using a method. Prevalence of PFM at 3.5 months was 97%.

	Desire use	Don't desire use	Don't know/whether desire use	Total
Current use	988 (99%)	30 (57%)	1 (33%)	1,019 (97%)
Current non-use	6 (0.6%)	23 (43%)	1 (33%)	30 (3%)
Current sometimes use	6 (0.6%)	0 (0%)	1 (33%)	7 (0.7%)
Total*	1,000 (95%)	53 (5%)	3 (0.3%)	1,056 (100%)

Notes: \* Percentages in this row are row percentages; all other percentages in the table are column percentages; green cells indicate PFM, orange cells no PFM.

## CONCLUSIONS

Within the context of an adolescent SRHR program in Northern Nigeria, we demonstrate that PFM can effectively identify individuals whose contraceptive preferences do not match their current contraceptive behaviors. At the program level, such information may be useful for directing targeted support for contraceptive autonomy – whether to remove access barriers for those who wish to initiate contraceptive use, or to support switching or stopping method use in line with preferences.

**Preference-aligned fertility management (PFM) is a new, straightforward FP outcome measure that can provide actionable data to advance rights-based FP programs and policies.**

Funding: This work was supported by the Bill & Melinda Gates Foundation under grant (INV-004274) and the Children's Investment Fund Foundation under grant (R-1911-04245). The contents of this article are those of the authors and do not necessarily reflect the views of funders.

<sup>1</sup> Holt K, Galavotti C, Omolubi E, Challa S, Waiswa P, Liu J. Preference-Aligned Fertility Management as a Person-Centered Alternative to Contraceptive Use-Focused Measures. *Studies in Family Planning*. 2023;54(1):301-8.

