UCSF University of California, San Francisco | Bixby Center for Global Reproductive Health

Development of a Reproductive Autonomy Measure to Predict Contraceptive Use

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Background

The ability to control one's own reproduction is fundamental to a woman's life trajectory. Yet research on women's autonomy and reproductive outcomes in the US is limited, perhaps because few validated measures of women's autonomy exist.

Objective:

We aimed to develop a theory-based validated instrument to measure women's reproductive autonomy.

Research Questions:

1. Is reproductive autonomy associated with consistent contraceptive use?
2. Is reproductive autonomy associated with plans to use contraception?

Methods

Steps to Scale Development

1. Reviewed relevant theory on reproductive empowerment and autonomy
2. Identified items used in other assessments that could be adapted for the reproductive context
3. Developed initial list of 24 items
4. Conducted cognitive interviews to field-test the items among family planning clients at a San Francisco Bay area family planning clinic
5. Changed introductory text, edited 15 of the items, deleted one item, added three items
6. Resulted in a survey of 26 theory-based items

Psychometric Analysis

- Factor analysis: Used principle components analysis with orthogonal rotation
- Cronbach's alpha was estimated to assess consistency within each group of items and eliminate items that were inconsistent with the other variables in the same factor
- Scale refinement: Item reduction and reliability testing
- This process resulted in 15 items that together form 3 measures of reproductive autonomy

Survey Implementation

- Self-administered iPad survey at 13 US family planning clinics from January to May 2011
- Survey included questions on contraceptive use and attitudes towards new methods
- Sample included 1,533 women who never had an abortion

Data Analysis

- Two separate multivariable logistic regression models of the effects of each Reproductive Autonomy subscale on 1) consistent contraceptive use and 2) plans to use a method. Both models adjusted for age, race, education.

Results

Factor analysis revealed 3 Reproductive Autonomy subscales (15 items total)	
Communication (Alpha=0. 71)	1. My partner would support me if I wanted to use a method to prevent pregnancy. 2. It is easy to talk about sex with my partner. 3. If I didn't want to have sex I could tell my partner. 4. If I was worried about being pregnant or not being pregnant I could talk to my partner about it. 5. If I really did not want to become pregnant I could get my partner to agree with me.
Decision-making Index (Alpha=0.60)	1. Who has the MOST say about when you have sex? 2. Who has the MOST say about whether you use a method to prevent pregnancy? 3. Who has the MOST say about which method you would use to prevent pregnancy? 4. Who has the MOST say about when you have a baby in your life? 5. If you became pregnant but it was unplanned, who would have the MOST say about whether you would raise the child, seek adoptive parents, or have an abortion?
Coercion (Alpha=0.83)	1. My partner has stopped me from using a method to prevent pregnancy when I wanted to use one. 2. My partner has messed with or made it difficult to use a method to prevent pregnancy when I wanted to use one. 3. My partner has made me use a method to prevent pregnancy when I did not want to use one. 4. If I wanted to use a method to prevent pregnancy my partner would stop me. 5. My partner has pressured me to become pregnant.

Figure 1. Distribution of sample on the communication subscale

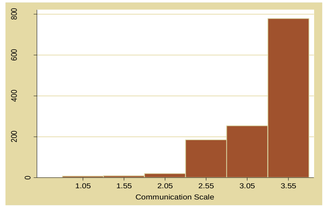


Figure 2. Distribution of sample on the decision-making index

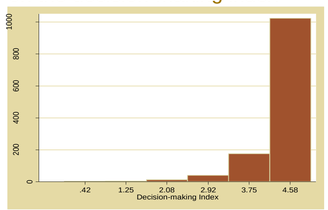


Figure 3. Distribution of sample on the coercion subscale

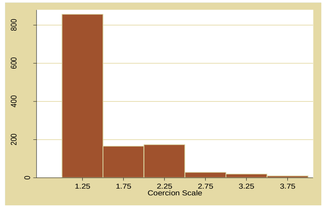
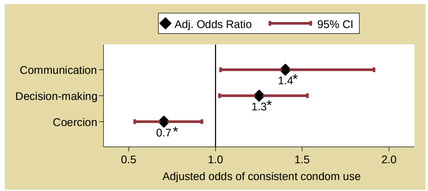
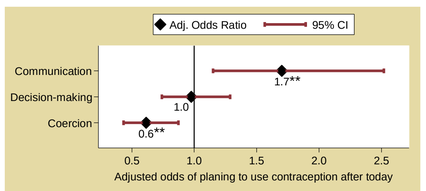


Figure 4. Higher scores on the communication and decision-making subscales and lower scores on the coercion subscale were associated with consistent contraceptive use in the last 30 days.



Multivariable logistic regression model is also adjusted for age, race, and education. n=1,058 *p<0.05

Figure 5. Higher scores on the communication subscale and lower scores on the coercion subscale were associated with planning to use contraception after today. Decision-making was not significant.



Multivariable logistic regression model is also adjusted for age, race, and education. n=1,056 **p<0.01

Conclusion

- All three reproductive autonomy subscales, (communication, decision-making, and coercion) were associated with reported consistent contraceptive use in the last 30 days.
- Only communication and coercion were associated with plans to use contraception.
- Longitudinal research is needed to determine whether autonomy predicts contraceptive uptake, consistent use, and long term continuation.
- This instrument could be used in clinical practice to identify users requiring additional support.

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