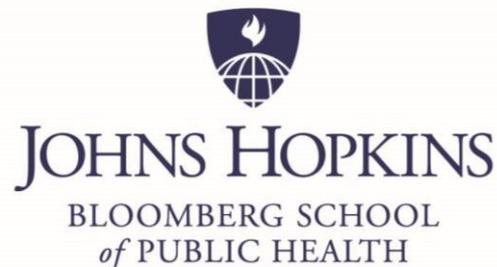


A new way to measure girls' menstrual experiences: The Menstrual Practice Needs Scale (MPNS-36)

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Agnes Nansubuga, Calum Smith, Maggie Redshaw, Agnes Akullo, Kellogg J Schwab



Objectives

- How can I capture menstrual hygiene or health needs in my community?
- What is the association between menstrual experience and school attendance, or wellbeing?
- How do I know if I've improved menstrual health/hygiene in my community?
 - How can I demonstrate to my funder that I have improved menstrual health/hygiene in my community?

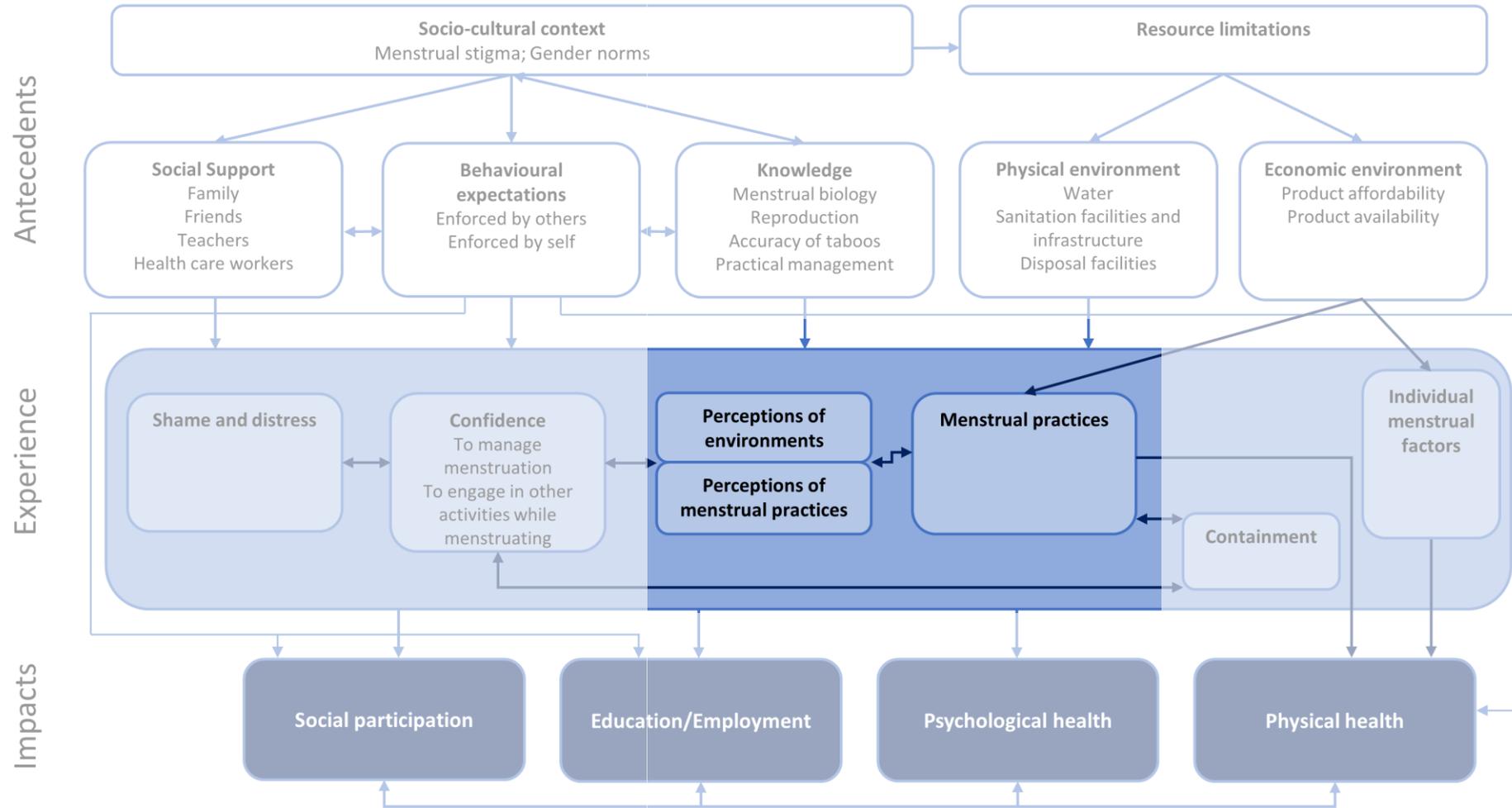


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What to measure...





Practices vs Perceptions

Type of menstrual material used	Feeling satisfied with the material used
Number of times materials are changed in 24 hours	Being able to change materials as often as you need to
Materials are dried in the sun	Can dry your materials in desired privacy

Practices vs Perceptions

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- **What do you think is more important for:**
 - **Reproductive tract infections**
 - **Anxiety**
 - **School attendance**
- **What do you measure to evaluate the effectiveness of your intervention?**

Menstrual Practice Needs Scale

Measures the extent to which respondents' menstrual management practices and environments were perceived to meet their needs during their last period.

Considerations

- Coverage across menstrual practices (Hennegan et al., [2016](#))
- Variation of experiences across environments (home, school) (Hennegan & Sol, [2019](#))
- Learning from past measures (Hennegan et al., [2019](#))

Developing the items

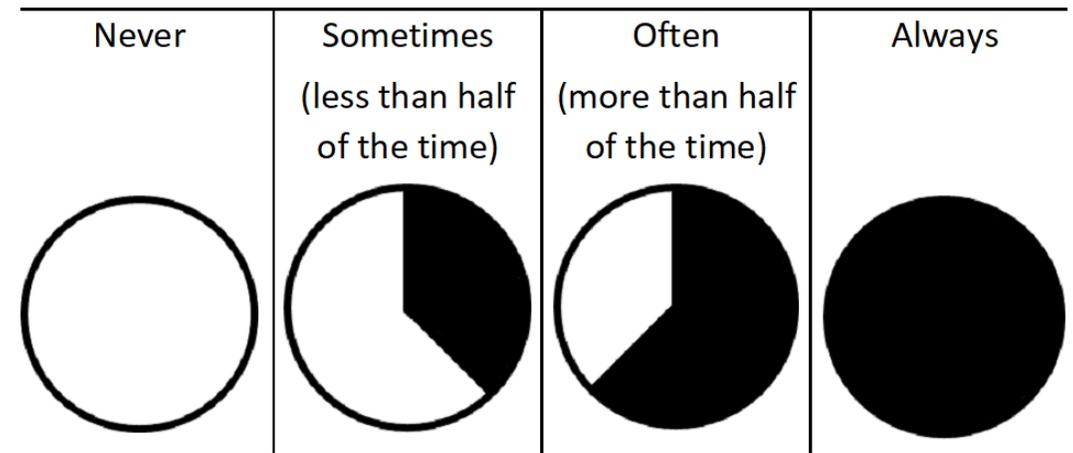
- Pool of 54 items based on capturing experiences across a range of practices
- Survey of 23 experts

During my last menstrual period....
My menstrual materials were comfortable
When at school, I worried that someone would see me while I was changing my menstrual materials

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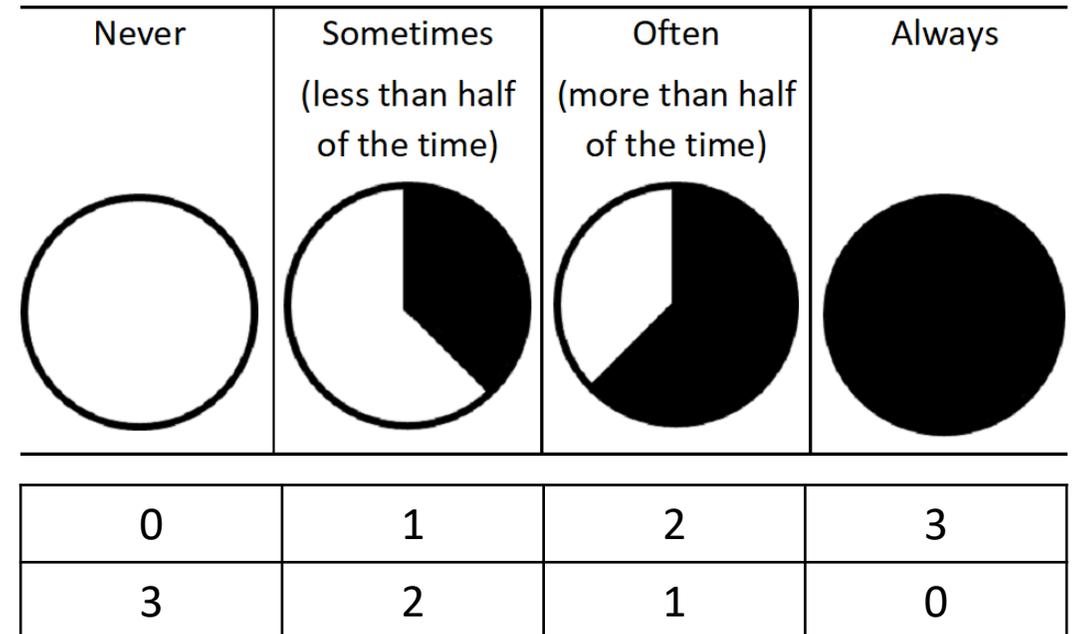
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Testing the scale

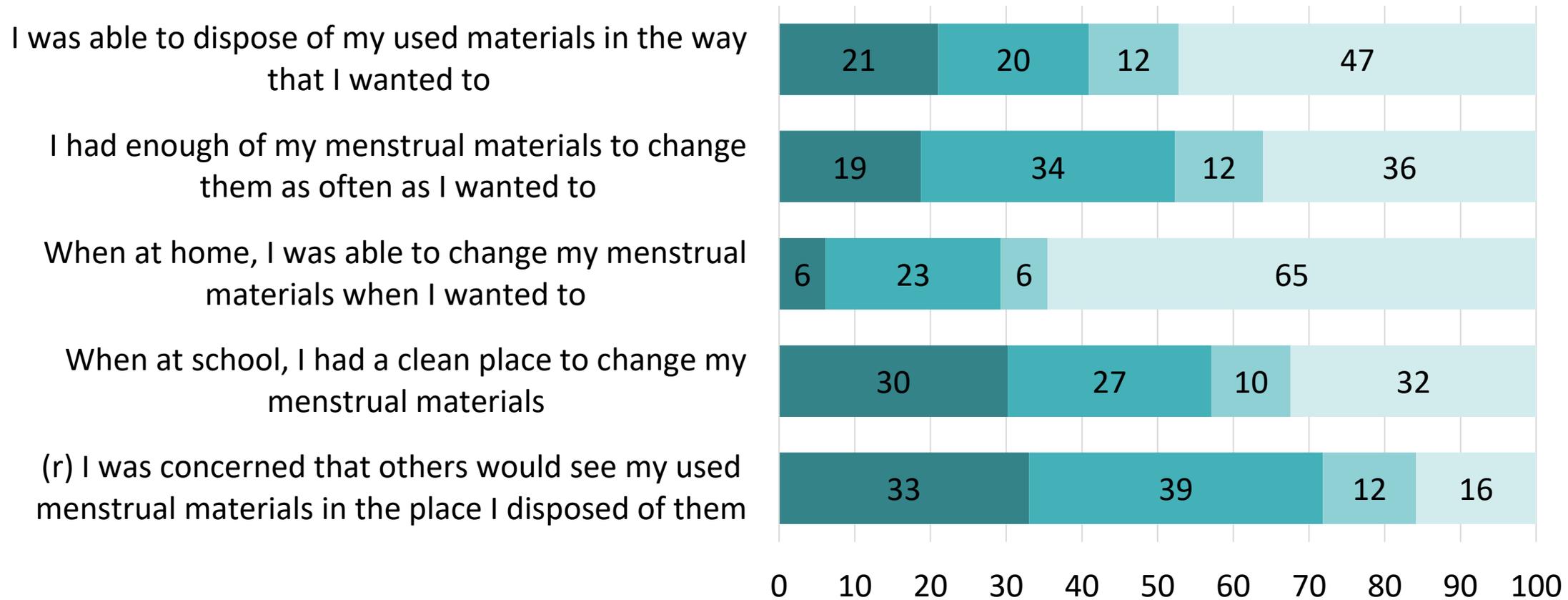
- 538 menstruating schoolgirls from 12 schools in Soroti district, Uganda
- Female research assistants interviewed girls in groups of six
- Participants marked responses on own paper surveys
- Testing item and scale performance, developing final 36-item measure



Item performance

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■ Never ■ Sometimes ■ Often ■ Always



Sub-scales (dimensions)

Material & home environment needs (11 items)

I had enough of my menstrual materials to change them as often as I wanted to

Material reliability concerns (3 items)

I worried that my menstrual materials would allow blood to pass through to my outer garments

Reuse insecurity (5 items)

I worried that my menstrual materials would not be dry when I needed them

Transport & school environment needs (5 items)

I felt comfortable carrying spare menstrual materials with me outside my home

Change & disposal insecurity (9 items)

When at school, I worried that someone would see me while I was changing my menstrual materials

Reuse needs (3 items)

I was able to wash my menstrual materials when I wanted to

Reliability and validity

- **Reliability:** are responses to the scale consistent (across questions and over time)?
 - Internal consistency (consistency across responses) ✓
 - Test-retest reliability (consistency over time) ✓
- **Validity:** does our scale measure what we think it is measuring?
 - Face validity *“does it look like it measures what we want it to? To participants? To stakeholders?”* ✓
 - Relationships with other concepts
 - Psychological distress ✓
 - Confidence to manage menstruation at home and school ✓
 - Self-reported absenteeism ✓

Findings and next steps

- Testing suggests acceptable reliability and validity
- Identified multiple dimensions within our clearly defined concept for measurement
- Testing the questions in other languages and settings
 - Bangladesh
 - Adult women in Uganda (Luganda)
- Supporting use of the measure...

Using the MPNS-36

www.menstrualpracticemeasures.org/mpns-36/

- Download and use the scale
- User Guide
- FAQ

The Menstrual Practice Needs Scale (MPNS-36)

The MPNS-36 measures the extent to which respondents' menstrual management practices and environments were perceived to meet their needs during their last period.

[Find out more](#)

You can also email info@menstrualpractciemeasures.org

It may be helpful to substitute "less than half the time" for sometimes and "more than half the time" for often.

During my last menstrual period....				
	Never	Sometimes	Often	Always
1 My menstrual materials were comfortable	○	◐	◑	●
2 I had enough of my menstrual materials to change them as often as I wanted to	○	◐	◑	●
3 I was satisfied with the cleanliness of my menstrual materials	○	◐	◑	●
4 I could get more of my menstrual materials when I needed to	○	◐	◑	●
5 I worried that my menstrual materials would allow blood to pass through to my outer garments	○	◐	◑	●
6 I worried that my menstrual materials would move from place while I was wearing them	○	◐	◑	●
7 I worried about how I would get more of my menstrual material if I ran out	○	◐	◑	●
8 I felt comfortable carrying spare menstrual materials with me outside my home	○	◐	◑	●
9 I felt comfortable carrying menstrual materials to the place where I changed them	○	◐	◑	●
10 I felt comfortable storing [keeping] my leftover or cleaned menstrual materials until my next period	○	◐	◑	●
11 I was able to wash my hands <u>when</u> I wanted to	○	◐	◑	●
12 I was able to immediately dispose of my used menstrual materials	○	◐	◑	●
13 I was able to dispose of my used materials in the way that I wanted to	○	◐	◑	●
14 I worried about where to dispose of my used menstrual materials	○	◐	◑	●
15 I was concerned that others would see my used menstrual materials in the place I disposed of them	○	◐	◑	●
At home during my last menstrual period...				
16 When at home, I was able to change my menstrual materials <u>when</u> I wanted to	○	◐	◑	●
17 When at home, I was satisfied with the place I used to change my menstrual materials	○	◐	◑	●

Find out more...

Info & download the MPNS-36: www.menstrualpracticemeasures.org

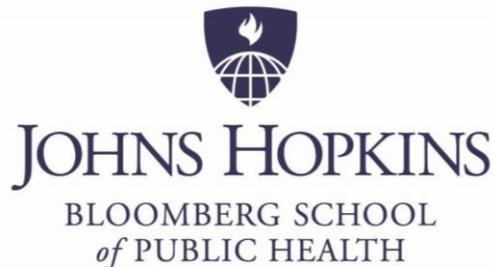
Details on development and validation:

Hennegan, J., Nansubuga, A., Smith, C., Redshaw, M., Akullo, A., & Schwab, K.J. (2020). Measuring menstrual hygiene experience: Development and validation of the Menstrual Practice Needs Scale (MPNS-36) in Soroti, Uganda. *BMJ Open*, 10, e034461. <http://dx.doi.org/10.1136/bmjopen-2019-034461>



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Thank you...



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