Overcoming the ambiguity of sexual partnership type:

A novel categorisation using data from Britain's 3rd National Survey of Sexual Attitudes & Lifestyles (Natsal-3)

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On behalf of: Kyle Jones [1], Anne Johnson [1], Ruth Lewis [2], Kirsti Mitchell [2], Soazig Clifton [1,3], Clare Tanton [1], Pam Sonnenberg [1], Kaye Wellings [2], Jackie Cassell [4], Claudia Estcourt [5]

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5. Barts and the London School of Medicine and Dentistry

Background

- Understanding STI risk requires knowledge not only of the *number* of sexual partners someone has, but also the *nature* of those relationships.

  ➢ *reflected in the UK's clinical guidelines on STI risk assessment*
  ➢ *influences PN decision-making & outcomes*

- Despite its clinical & epidemiological relevance, there is a lack of consensus as to what constitutes different types of partnership

- Considerable subjectivity exists in defining partnership type

- Rendering comparisons of audit and research findings problematic.

Aims

To examine:

1. whether partnership characteristics, specifically:

   ➢ *Partnership duration*
   ➢ *Perceived likelihood of having sex again with the partner*

   ...can be used to distinguish between different types of sexual partnership

2. whether, and if so how, reporting STI diagnoses varies according to recent sexual partnership history

   ...above and beyond the number of partners reported.

Methods

Data source	Britain's 3rd National Survey of Sexual Attitudes & Lifestyles (Natsal-3)
Fieldwork dates	2010-2012
Sample size	15,162
Age range	16-74y
Target population	British resident population
Data collection method	CAPI (face-to-face) & CASI
Response rate	58%
Co-operation rate	66% (interviews completed from eligible addresses for which contact was made)
Further details	www.natsal.ac.uk & Erens *et al*, STI 2013

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Question module on most recent sexual partners

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Methods

- Study population limited to the 11,040 participants who reported ≥1 partner in the past *year* as this timeframe reduces:

  ➢ *Recall error*
  ➢ *Proportion of participants reporting >3 partners as these higher-order partners weren't asked about in this module*

- Questions of particular relevance to this study:

  ➢ *Month & year of 1st & most recent sex with the partner*
      ...used to calculate partnership duration

  ➢ *Perceived likelihood of having sex again with the partner*
      ...'yes', 'probably', 'probably not', 'no', 'don't know'

  ➢ *Relationship status at 1st & most recent sex*

		Relationship status at most recent sex					
		Met for the 1st time	Recently met	Known each other a while	Steady relationship	Living together/ married	Ex-steady relationship
Relationship status at 1st sex	Met for the 1st sex						
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36 'Partnership Progression Types'

		Relationship status at most recent sex					
		Met for the 1st time	Recently met	Known each other a while	Steady relationship	Living together/ married	Ex-steady relationship
Relationship status at 1st sex	Met for the 1st sex	✓	✓	✓	✓	✓	✓
	Recently met	X	✓	✓	✓	✓	✓
	Known each other a while	X	X	✓	✓	✓	✓
	Steady relationship	X	X	X	✓	✓	✓
	Living together/ married	X	X	X	✓	✓	✓
	Ex-steady relationship	X	X	X	✓	✓	✓

36 'Partnership Progression Types'

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	Recently met	X	✓	✓	✓	✓	✓
	Known each other a while	X	X	✓	✓	✓	✓
	Steady relationship	X	X	X	✓	✓	✓
	Living together/ married	X	X	X	✓	✓	✓
	Ex-steady relationship	X	X	X	✓	✓	✓

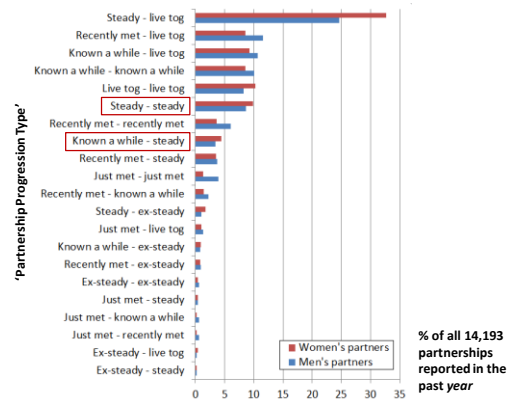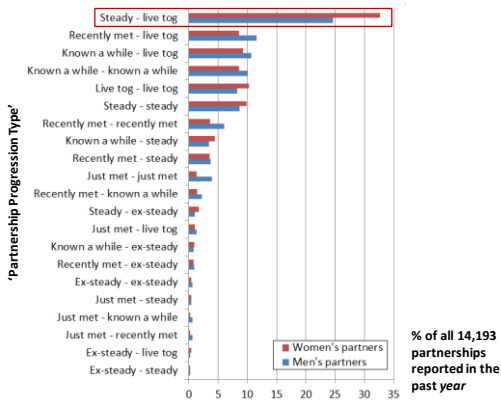**PPT = Recently met -> Known each other a while**

36 'Partnership Progression Types'

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Relationship status at 1st sex	Met for the 1st sex	✓	✓	✓	✓	✓	✓
	Recently met	X	✓	✓	✓	✓	✓
	Known each other a while	X	X	✓	✓	✓	✓
	Steady relationship	X	X	X	✓	✓	✓
	Living together/ married	X	X	X	✓	✓	✓
	Ex-steady relationship	X	X	X	✓	✓	✓

24 plausible 'Partnership Progression Types'

		Relationship status at most recent sex					
		Met for the 1st time	Recently met	Known each other a while	Steady relationship	Living together/ married	Ex-steady relationship
Relationship status at 1st sex	Met for the 1st sex	✓	✓	✓	✓	✓	✓
	Recently met		✓	✓	✓	✓	✓
	Known each other a while			✓	✓	✓	✓
	Steady relationship				✓	✓	✓
	Living together/ married				✓	✓	✓
	Ex-steady relationship				✓	✓	✓

## Using statistics to collapse the 24 Partnership Progression Types

- **ANOVA** with rank-transformed partnership duration data to investigate if statistically significant differences in partnership duration exist *between* - but not *within* - groups.

- **Logistic regression** then used to examine whether the likelihood of having sex again varied *between* the summary types identified in the ANOVA but not *within* the summary types.

- Survey functions in **Stata** v.13 used for all analyses to account for the sample weighting, clustering, and stratification within the Natsal-3 sample.

Results

- 24 Partnership Progression Types could be collapsed into 4 groups labelled:

    1. Cohabiting

    2. 'Ex-steady'

    3. 'Now steady'

    4. 'Currently casual' (as may go on to become 'now steady' etc)

…according to partnership duration & perceived likelihood of sex again
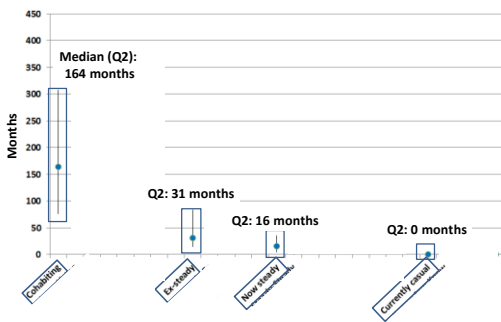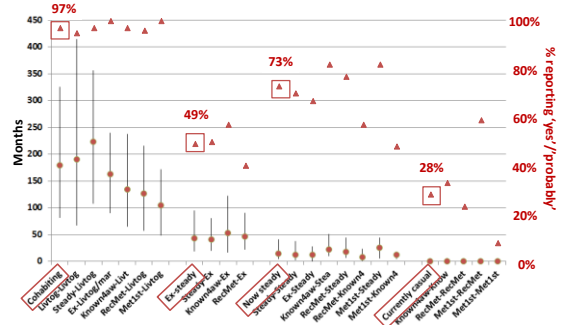
Median duration & IQR of partnership duration by PPT: Men's partnerships

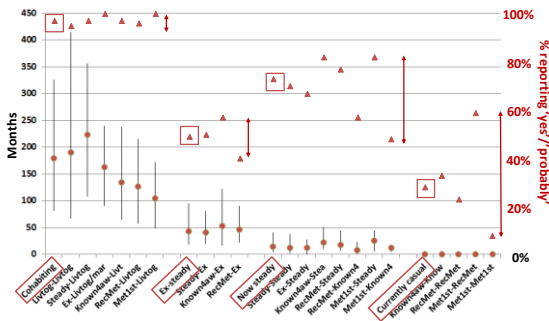## Median duration & IQR of partnership duration by PPT: Men's partnerships

3
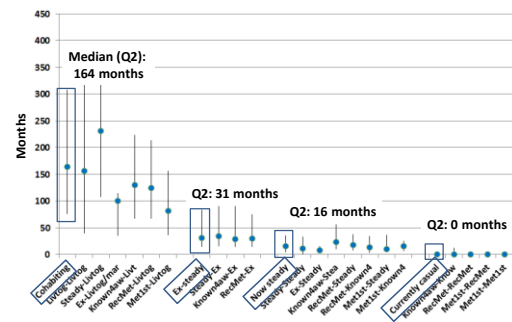
Median duration & IQR of partnership duration by PPT: Women's partnerships
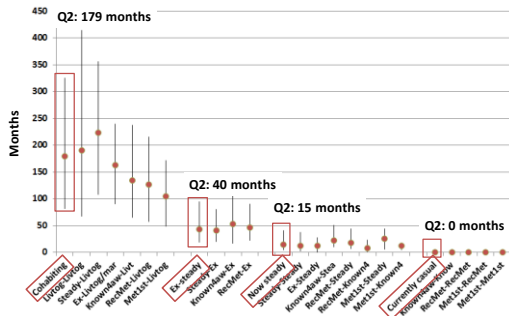

Perceived likelihood of sex again: Women

## Perceived likelihood of sex again: Women

Participants' partnership histories in the past year

- Each participant could report ≤3 partner(s) in the past year.

- In Natsal-3 dataset, 84 different combinations identified taking account partnership order, e.g.:
    'currently casual' -> 'cohabiting' -> 'currently casual'
    'cohabiting' -> 'currently casual' -> 'currently casual'

- 34 different combinations if partnership order ignored, e.g.:
    2 'currently casual' & 1 'cohabiting'
    1 'ex-steady', 1 'currently casual', 1 'now steady'

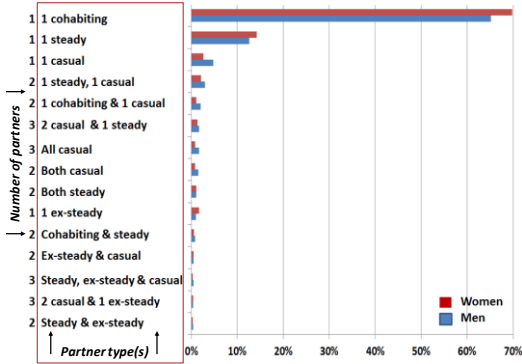- In Natsal-3, 15 combinations account for 97% of all men & 98% of all women

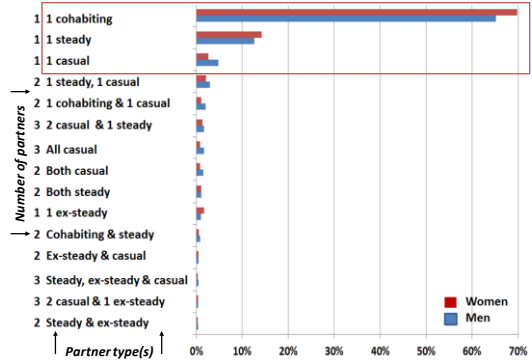## Ranked distribution of 15 partnership histories
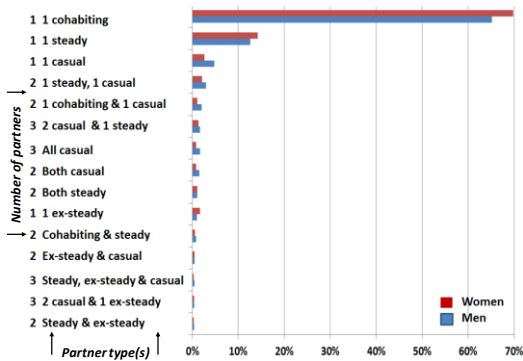
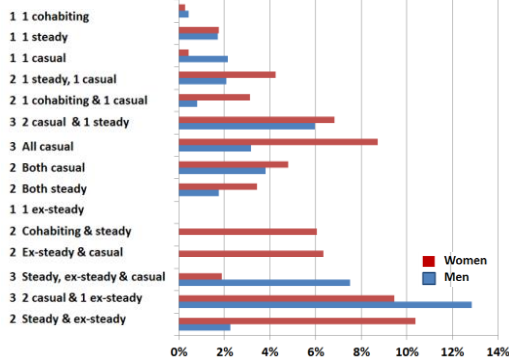## Ranked distribution of 15 partnership histories
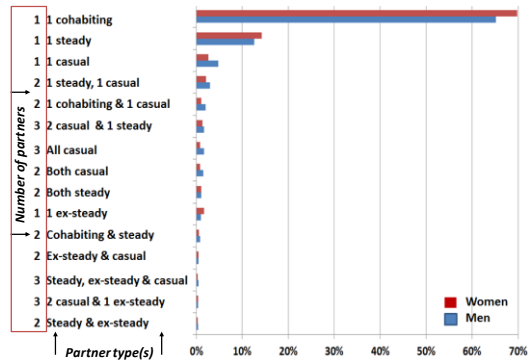
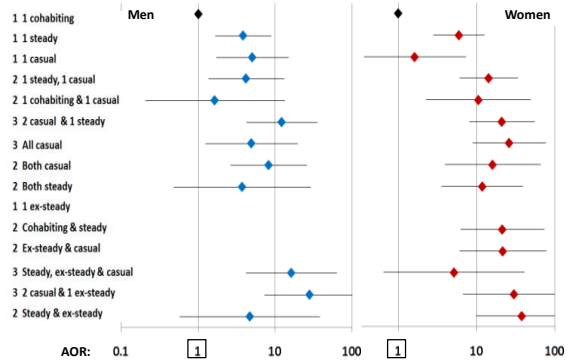## Ranked distribution of 15 partnership histories

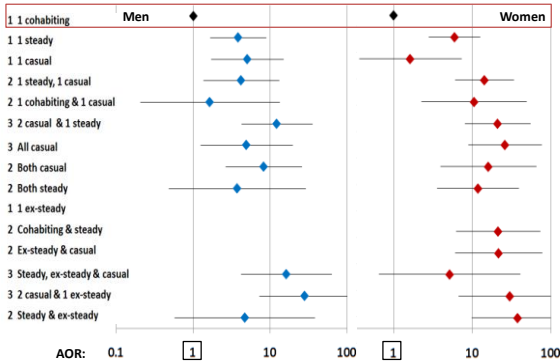## Ranked distribution of 15 partnership histories

Reported STI diagnosis/es by partnership history

ORs for reporting STI diagnosis/es by Px history adjusting for partner numbers

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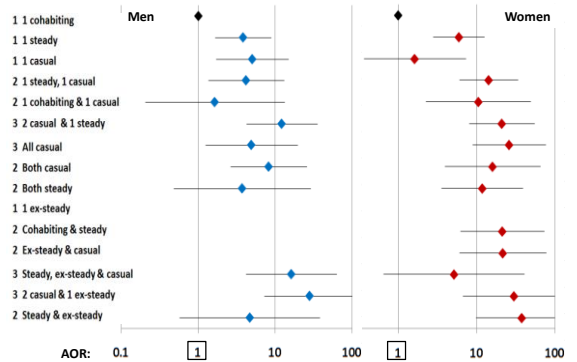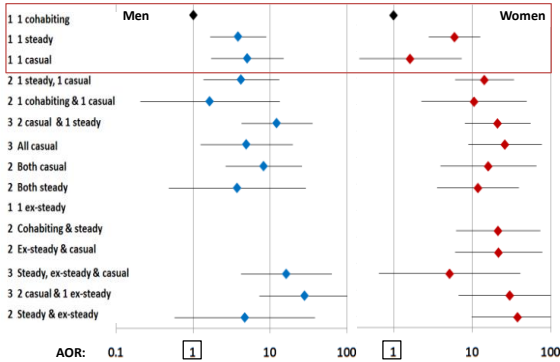

ORs for reporting STI diagnosis/es by Px history adjusting for partner numbers

ORs for reporting STI diagnosis/es by Px history adjusting for partner numbers

	Men	Women
1 1 cohabiting		
1 1 steady		
1 1 casual		
2 1 steady, 1 casual		
2 1 cohabiting & 1 casual		
3 2 casual & 1 steady		
3 All casual		
2 Both casual		
2 Both steady		
1 1 ex-steady		
2 Cohabiting & steady		
2 Ex-steady & casual		
3 Steady, ex-steady & casual		
3 2 casual & 1 ex-steady		
2 Steady & ex-steady		

AOR: 0.1 1 10 100 1 10 100

Conclusions & implications

- **Using data from just 2 questions:**
  - **Partnership duration**
  - **Perceived likelihood of sex again**
  …**enabled 4 distinct types of sexual partnership to be identified in, and quantified for, the British population.**

- **This typology enabled differences in individuals' STI risk to be shown, over and above the number of partners reported (despite the limited statistical power).**

- **This typology is a valuable first step in defining partnership type, that isn't data intensive requiring responses to 2 questions both of which are relatively easy to ask and to answer.**

Conclusions & implications

- **Further research should investigate the extent to which the typology & thresholds apply in different settings.**

- **Qualitative research should ascertain the extent to which the typology and thresholds map on to both professional and lay understanding of sexual partnership type.**

- **We hope our partnership typology will contribute to improving understanding of what constitutes different types of sexual partner:**
  - **Strengthening the epidemiological evidence-base**
  - **Maximising individual and public health benefit.**

Thank you

- **Participants**
- **Interviewers**

- **Research team**
- **Funders**

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For further info visit: www.natsal.ac.uk or email: c.mercer@ucl.ac.uk