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Using Paradata for Instrument Evaluation and Refinement

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Defining Paradata

- **Data about data collection processes**

- **Can be automatic or manual**
  - **Automatic**
    - Timestamps
    - Keystrokes
  - **Manual**
    - Interviewer notes

- **Collected in all survey modes**

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Paradata Uses

- **During data collection**
  - **Adjust staffing to most successful dialing times**
  - **Determine follow-up timing**

- **After data collection**
  - **Nonresponse adjustments**

- **Between data collection waves**
  - **Adapting the design of the next wave**
  - **Instrument evaluation and refinement**

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The WIC BPI Study

- **Special Supplemental Nutrition Program for Women, Infants, and Children Breastfeeding Policy Inventory Study (WIC BPI) sponsored by the U.S. Department of Agriculture**

- **Two-part, new web survey about state and local agencies' breastfeeding promotion policies and practices, measurement, and data systems**
  - **Census of 90 state agencies and approximately 1,800 local agencies**
  - **91% response rate to both parts of the survey**
  - **Part 1 had a nonlinear design**

- **One objective was to evaluate the survey and make recommendations for future fielding**

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Evaluating the WIC BPI Survey

Question asked	Paradata source
Which questions took the longest to answer?	Time stamps
Did the respondents' patterns of response match the sponsor's priorities?	Time stamps
Which questions might be especially frustrating?	Break-off location
Did agency respondents share responsibility for participating?	Number of log-in attempts, communication with respondents

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Results

Which Questions Took the Longest?

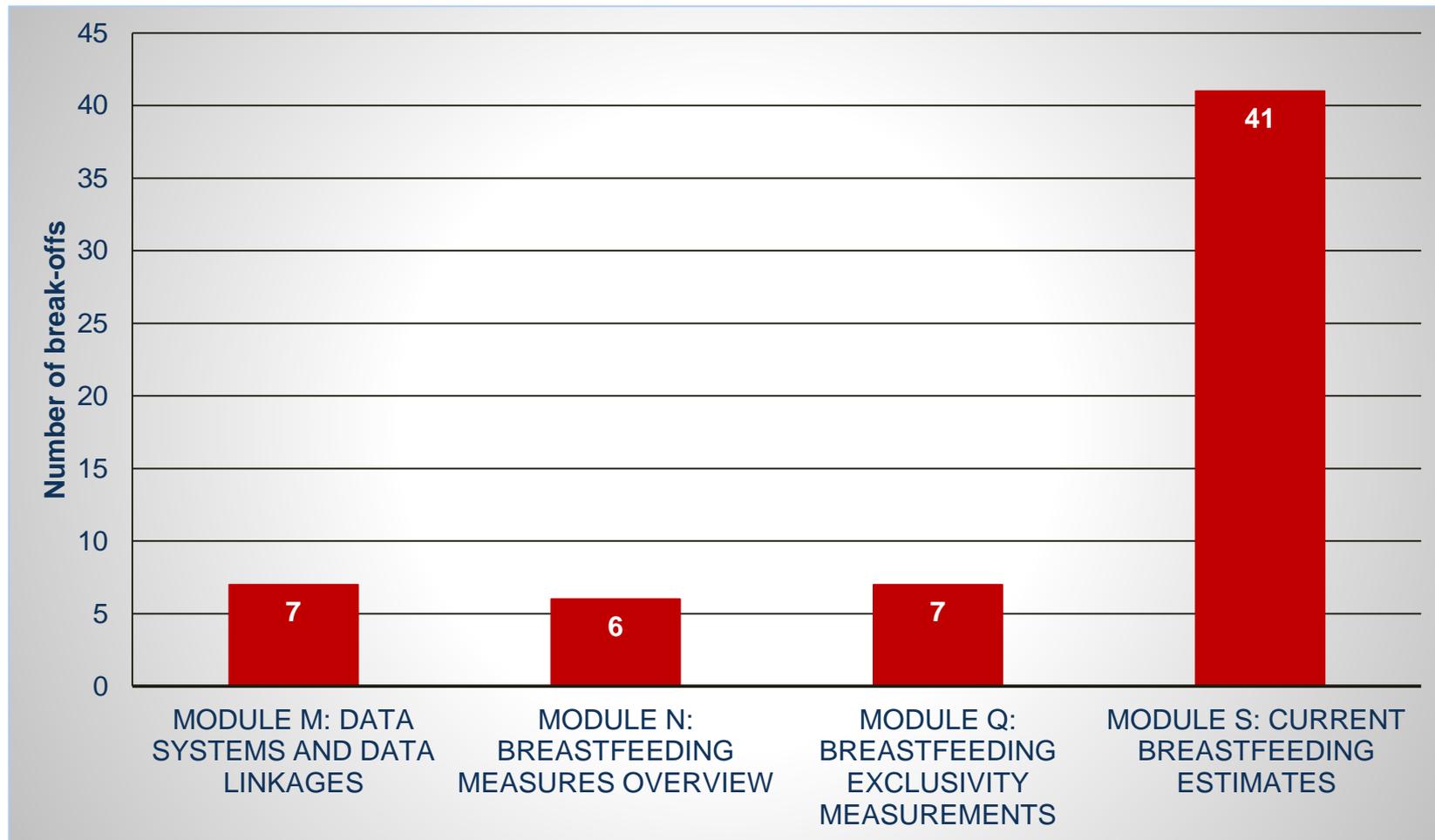| Question topics with the three highest estimates for local agencies	
Part 1	**Mean minutes**
Number of full-time equivalents in paid staff positions	3.9
Policy the agency would like to implement and barriers to its implementation	2.6
Minimum frequency of peer counseling contact attempts in prenatal and postpartum time periods	2.3

Which Questions Took the Longest?

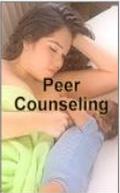| Question topics with the three highest estimates for local agencies	
Part 2	**Mean minutes**
Percentages of infants on fully, partially, and nonbreastfeeding food packages and total number of infants	10.1
Percentage of infants breastfed exclusively for at least three months, total number of infants, and population represented in estimate	6.0
Most recent estimate of other breastfeeding measure, who is included in it, and the months over which agency collected data included in the estimate	5.5

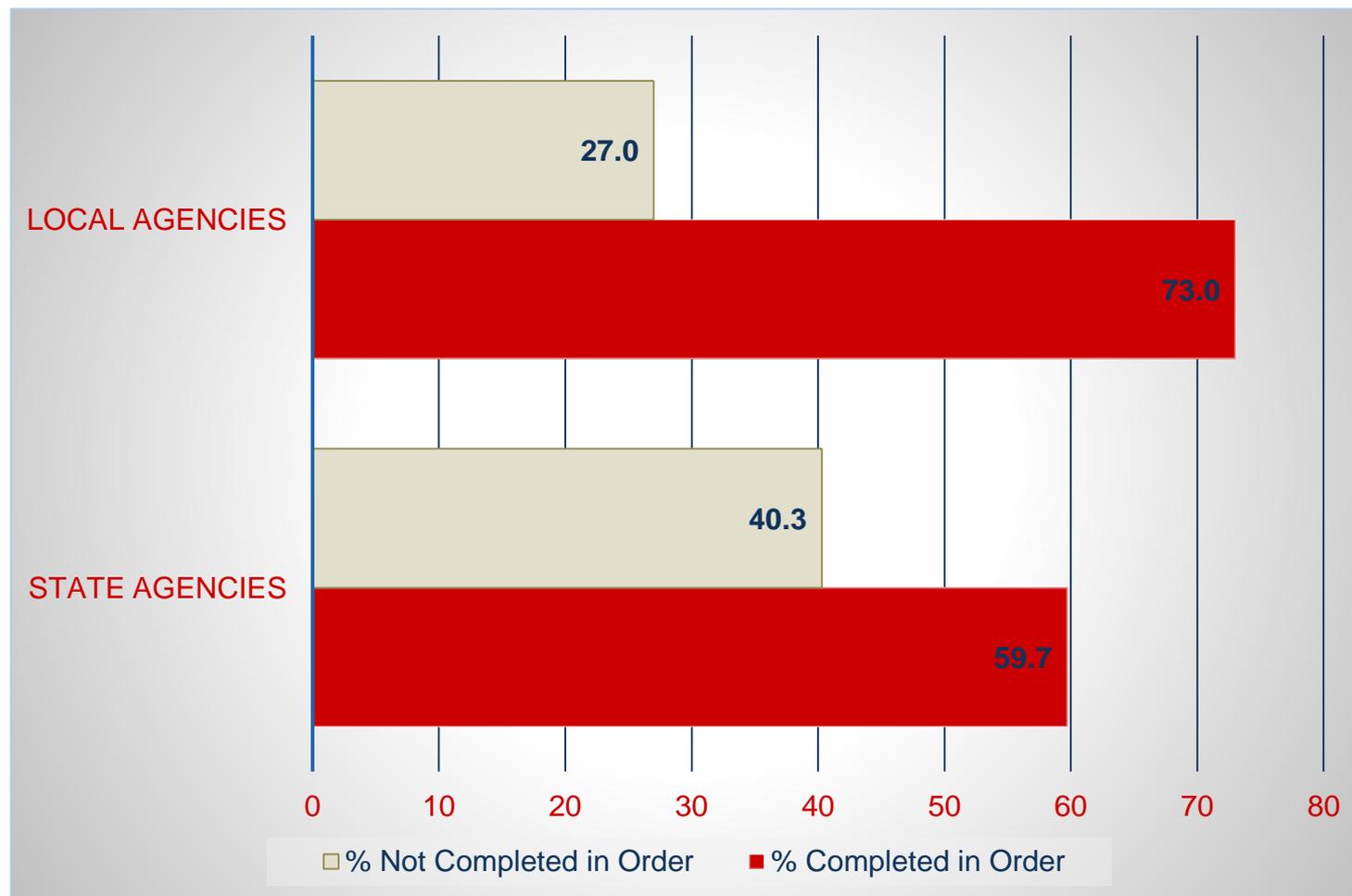# Which Questions Might Be Especially Frustrating?

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In Which Order Were Topics Completed?

In Which Order Were Topics Completed?

Did Respondents Share Responsibility?

Number of log-ins per completed survey		
	State agencies	Local agencies
Part 1	n = 87	n = 1,650
Mean	4.4	3.2
Median	4	2
Range	1–16	1–29
Part 2	n = 83	n = 1,592
Mean	5.3	3.1
Median	4	2
Range	1–24	1–20

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Limitations

- **Time stamps might not accurately capture true burden**

- **Order of completion likely reflects the influence of design rather than respondent's preference**

- **Who completed the survey was not collected systematically**

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Summary

- **Using these sources of paradata, we recommended for future administration:**

  – **Drop or convert to closed-ended format for burdensome questions**

  – **Send detailed instructions to help with complex questions**

  – **Place high-priority topics early in the survey**

  – **Encourage sharing participation among relevant staff**

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