

Exploring Electronic Personal Health Record Services as Sexual Health Discussion Tools: A Mixed-Methods Study Among Young Black Adults

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BACKGROUND

- Young Black adults are at increased risk for sexually transmitted diseases, including HIV, compared to other race/ethnic groups₁
- Effective partner communication about STDs can reduce disease transmission by supporting testing, disease status disclosure, condom use, and the use of medicines to prevent and treat STDs₂
- It is not well know how young Black adults perceive the utility of electronic personal health record (PHR) or patient portal services in prevention conversations on STD screening
- The Electronic Sexual Health Information Notification & Education (eSHINE) Study is a mixed-methods study exploring perceptions of PHRs as digital tools for partner communication among HBCU students with little to no PHR services awareness and access

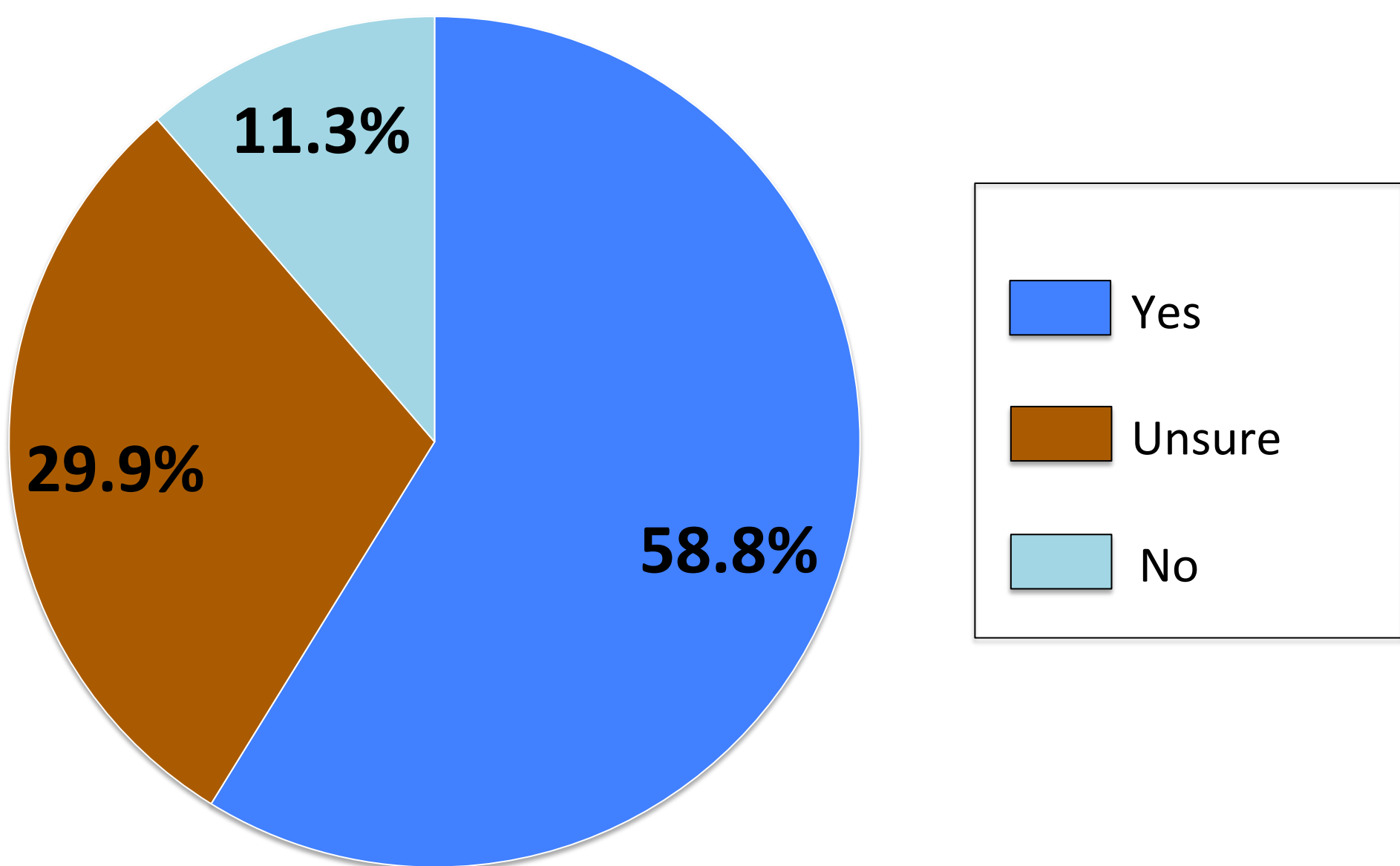
STUDY OBJECTIVES

- Use a Grounded Theory study approach to explore perceptions of using PHRs during STD risk discussions with sexual partners
- Develop an online instrument to measure qualitative findings in a larger study sample
- Use a Cross-Sectional Study to determine predictors of perceived intentions to use PHRs with partners and the prevalence of perceptions emergent from qualitative themes

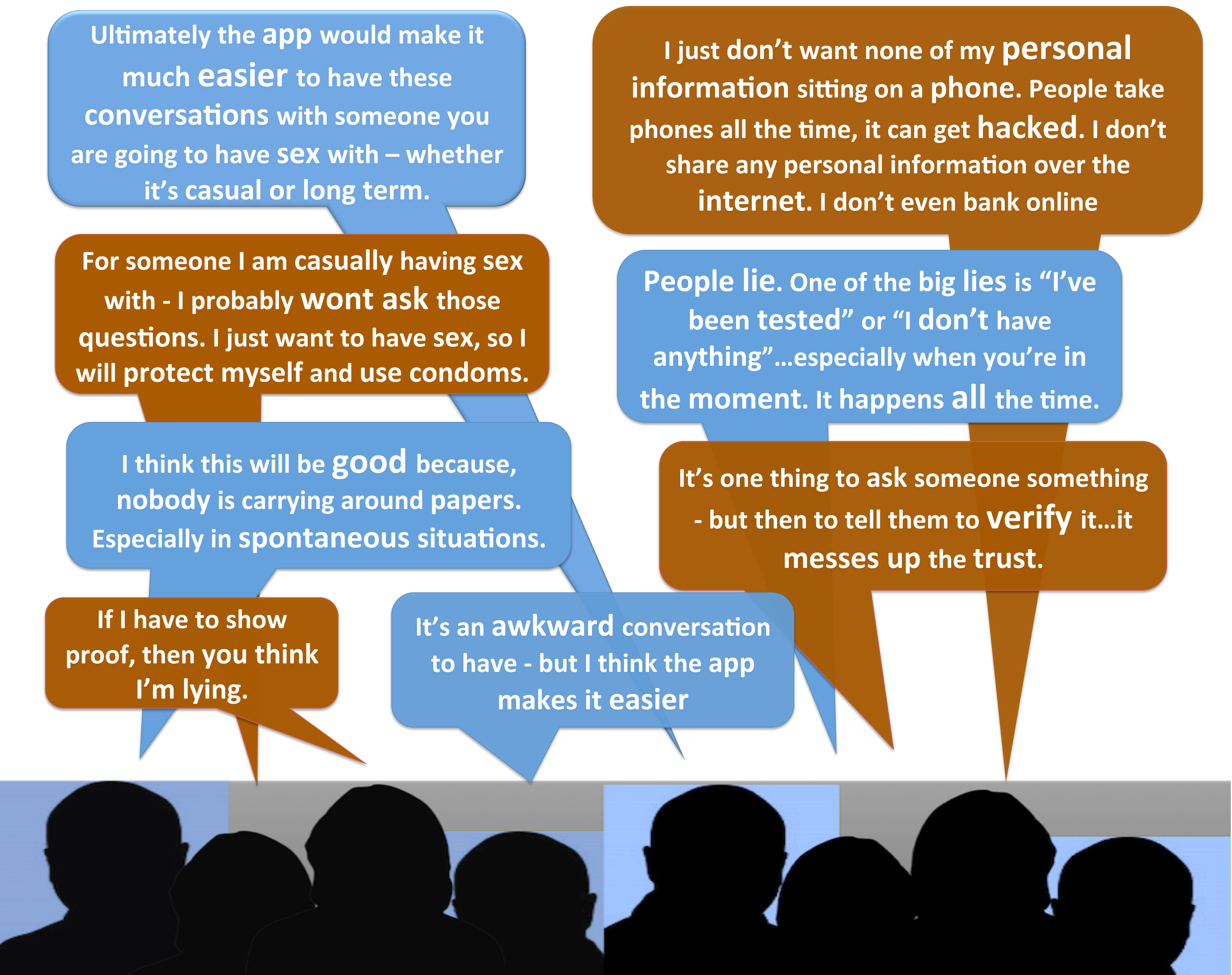
METHODS

- Exploratory Mixed-Methods Study Design
- Phase 1 Data Collection & Analysis (*n* = 35)
 - 3 Focus Groups ; 18 Individual In-depth Interviews
 - Audio recorded and transcribed into ATLAS.ti version 7 for thematic analysis
- Intermediate Phase – Instrument Development
- Phase 2 Data Collection & Analysis (*n* =354)
 - Online survey administered with Qualtrics software
 - Analyses conducted using STATA Statistical Package v.14

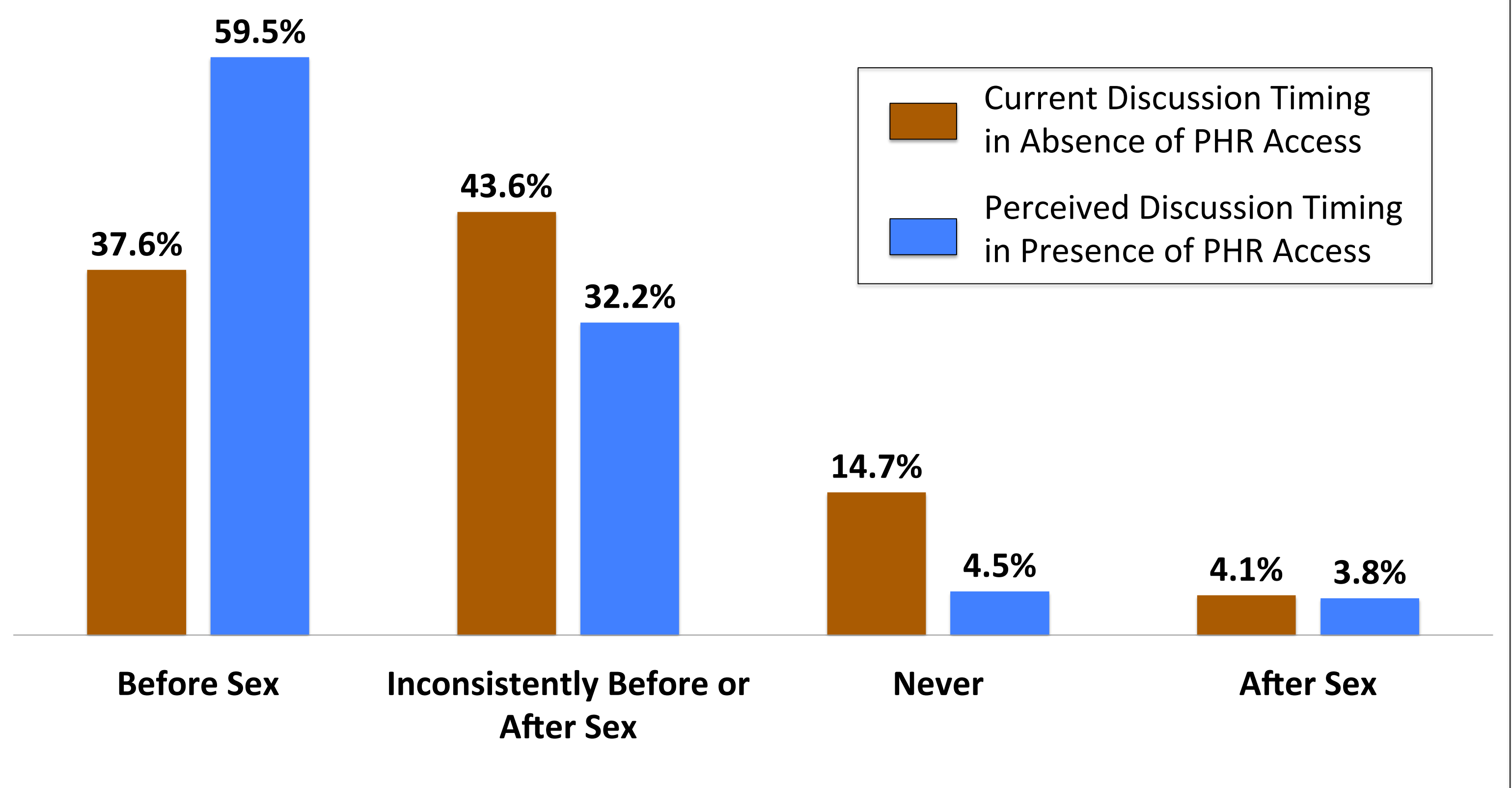
Perceived Intentions to Facilitate Risk Discussions with Sexual Partners using PHRs (*n* = 354)



Focus Group and Interview Quotations

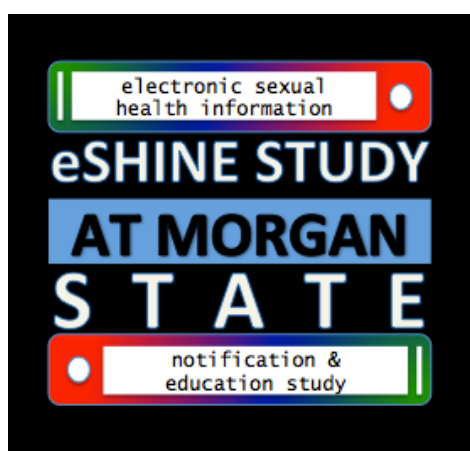


Current Risk Discussion Timing in Absence of PHR Access and Perceived Discussion Timing in Presence of PHR Access (*n* = 314)



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RESULTS

Cross-Sectional Results

Unadjusted and adjusted logistic regression analyses of perceived dyadic PHR utility predictors among eSHINE Study Phase 2 participants (*n* = 314)

Variables	n (%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Gender			
Male (ref.)	143 (45.5)	1.00	1.00
Female	171 (54.5)	0.80 (0.50, 1.26)	0.69 (0.34, 1.39)
Age			
18-19 (ref.)	113 (36.0)	1.00	1.00
20-21	116 (36.9)	0.91 (0.54, 1.53)	0.78 (0.35, 1.74)
22-23	69 (22.0)	1.22 (0.66, 2.25)	1.06 (0.40, 2.77)
24-25	16 (5.1)	2.21 (0.67, 7.29)	1.16 (0.26, 5.16)
Sex Partners in Past 12 Months			
0-1 (ref.)	132 (42.0)	1.00	1.00
2-5	79 (25.2)	1.07 (0.61, 1.88)	0.63 (0.26, 1.53)
≥6	103 (32.8)	1.44 (0.85, 2.45)	1.25 (0.57, 2.78)
Last STD Screening			
≤7 months (ref.)	152 (48.7)	1.00	1.00
>7 months	81 (25.8)	0.64 (0.37, 1.12)	0.37* (0.16, 0.84)
Never tested	80 (25.5)	0.57* (0.33, 0.99)	0.75 (0.31, 1.83)
Prior STD diagnosis	59 (18.8)	2.17* (1.16, 4.06)	2.73* (1.07, 6.97)
Likely to solicit partner screening history	203 (64.6)	1.68* (1.05, 2.68)	1.44 (0.70, 2.99)
Intentions to receive electronic STD results	181 (57.6)	15.2*** (8.75, 26.6)	9.57*** (4.58, 20.0)
PHRs perceived as convenient health management tools	279 (88.8)	10.7*** (4.04, 28.5)	5.32 ** (1.58, 17.9)
Out-of-pocket costs a PHR adoption barrier	137 (43.6)	0.25*** (0.15, 0.40)	0.69 (0.31, 1.51)
Device memory space limitations a PHR adoption barrier	134 (42.7)	0.17*** (0.10, 0.28)	0.39* (0.18, 0.87)
Privacy breach concerns a PHR adoption barrier	258 (82.2)	1.11 (0.62, 2.01)	0.62 (0.26, 1.51)
PHRs make facilitating risk discussions easier w/ new partners	229 (72.9)	6.38*** (3.66, 11.1)	2.37* (1.09, 5.19)
PHRs make facilitating check-in discussions w/ prior partners easier	250 (79.6)	8.49*** (4.37, 16.5)	3.22** (1.31, 7.94)
PHRs are moot in trusting relationships	164 (52.2)	2.01** (1.27, 3.18)	1.66 (0.84, 3.30)

Note. Sample excludes participants reporting no prior sex (*n* = 40). ref. is the reference category. Significance: * *p*<0.05; ** *p*<0.01; *** *p*<0.001.

CONCLUSIONS & IMPLICATIONS

Conclusions

- Young Black adults believed PHRs to increase the occurrence of partner discussions on STD screening prior to sex
- **(1)** Perceived intentions for electronic STD laboratory results delivery, **(2)** belief that PHRS are convenient health management tools, **(3)** reported history of STD diagnosis, **(4)** belief that PHRs make facilitating discussions with new partners easier and **(5)** check-in conversations with previous partners easier are significantly associated with increased likelihood of perceived intentions to use PHRs with partners
- **(1)** Device memory space limitations and **(2)** STD screening history greater than 7 months lower the odds of perceived intentions to use PHRs with partners
- Privacy breach concerns largely perceived as a barrier, however, there is no significant association with adoption
- Many participants are unsure about decisions on adopting PHRs to discuss screening with partners

Implications

- Young people overwhelmingly favor and consider the use of electronic record and health educational services offered by PHRs useful for facilitating discussions on STD prevention with their respective partners
- Greater awareness and access to PHR services are needed among Young Black adults to measure its preventative value in reducing racial disparities in STD rates
- Future studies are needed to examine the impact of STD PHR utility on risk behaviors