

SEXUAL AND REPRODUCTIVE HEALTH KNOWLEDGE: EMPOWERING WOMEN THROUGH SOCIAL DETERMINANTS OF HEALTH

Melanie Hanna-Johnson, MD, MHSA, Lucki Word, MA, Anil N. F.
Aranha, PhD

*Depts of Internal Medicine, Diversity and Inclusion, Medical Education, Wayne State University
School of Medicine, Detroit, MI*



PURPOSE

- The COVID-19 pandemic dynamic of sheltering-in-place affords possible opportunities to address social determinants of health (SDOH), as they relate to sexual and reproductive health knowledge (S&RHK).
- Strategic and crucial opportunities might exist for educational interventions by caregivers engaging in more frequent and prolonged encounters with young people.
- The purpose of this study was to evaluate whether two social determinants of health, income and education, are associated with sexual and reproductive health knowledge among adult women.



METHODS

- A 50-item survey was administered to women, aged 20-89 years, in two outpatient, metropolitan, primary care clinics in the United States.
- 18 of the 50 questions gauged S&RHK, and had only one correct answer. The maximal attainable score was 18.
- Data was coded and analyzed using IBM-SPSS. Statistical analysis included: Pearson correlation, *t*, and Chi-squared tests. Statistical significance was established at $p < 0.05$.



RESULTS:

- 287 women, with a mean (\pm SD) age of 55.3 ± 14.2 years, were surveyed.
- The majority (85.7%) were African-American, with 66 % having incomes \leq \$50,000.
- The group had a mean (\pm SD) 14.1 ± 2.5 years of formal education, and an S&RHK score of 10.2 ± 3.6 , on a scale of 0-18. Of those with formal sex education, 43.5% stated it was sufficient.
- 32% reported no history of formal sex education. 97% reported that having sufficient S&RHK was important. Positive correlations were found between years of education, income, and S&RHK scores ($p < 0.001$); a negative correlation between age and S&RHK scores ($p < 0.001$).



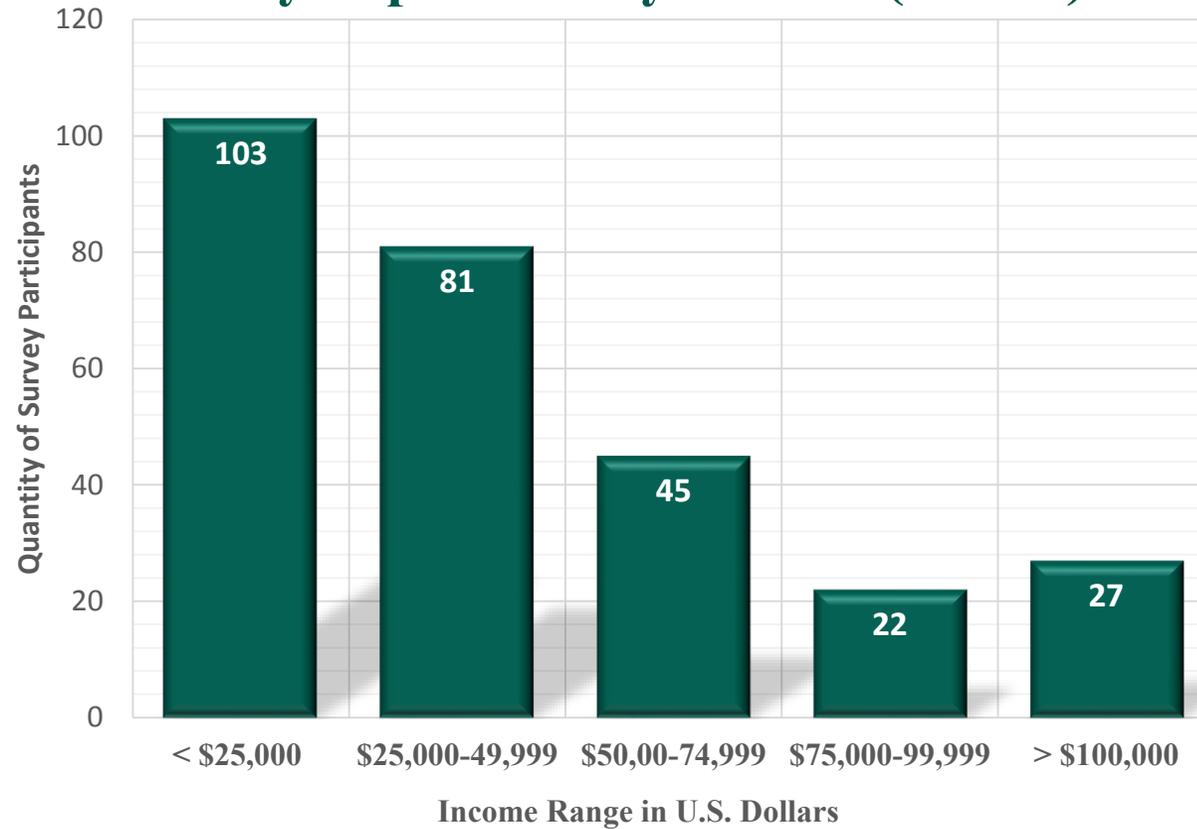
DESCRIPTIVE STATISTICS

	Mean	Std. Deviation
SRHK Total Score	10.40	3.448
Age	55.34	14.807
Years of Ed	14.19	2.474
Income	2.24	1.293



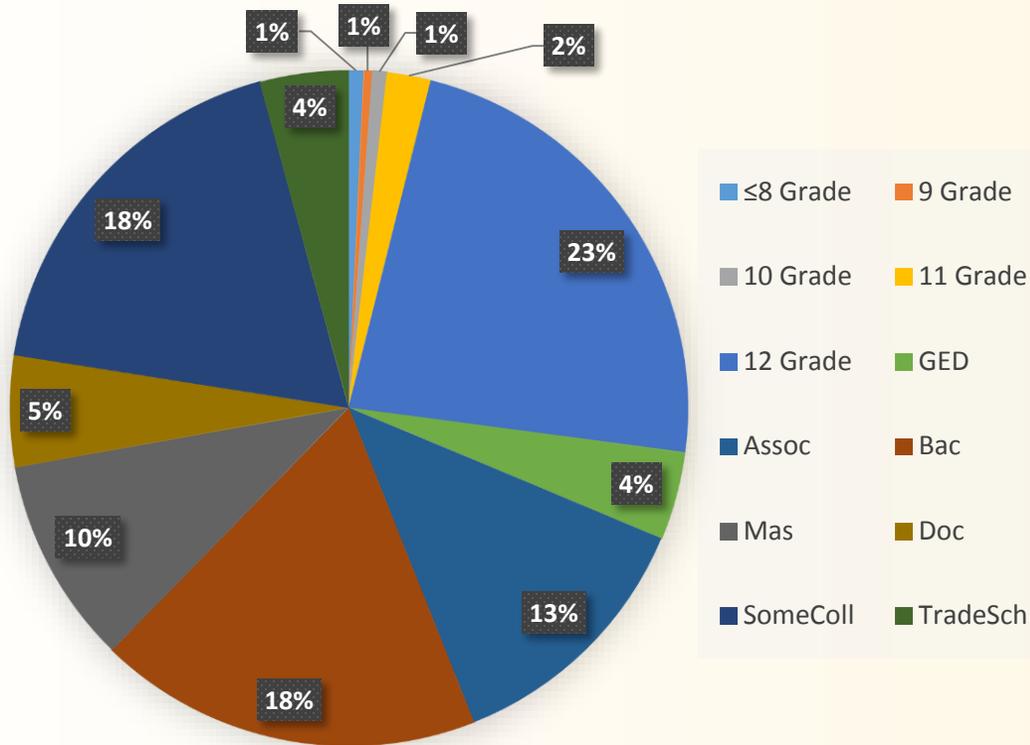
Results

Survey Population by Income (N=287)

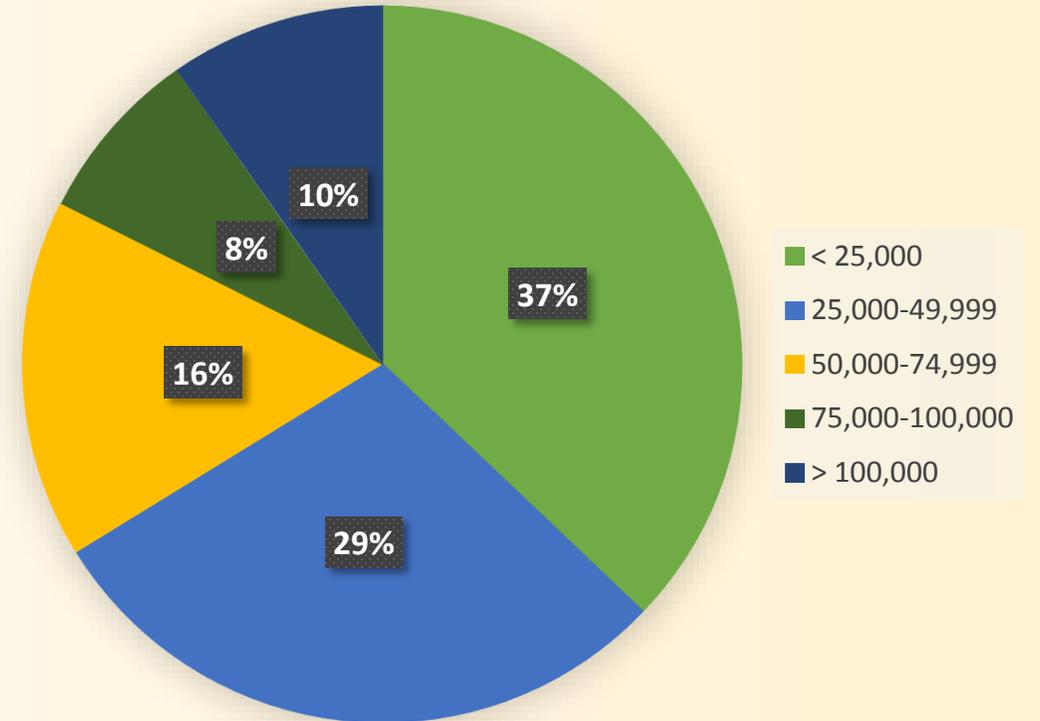


RESULTS

Patient Characteristics by Level of Education



Patient Characteristics by Income

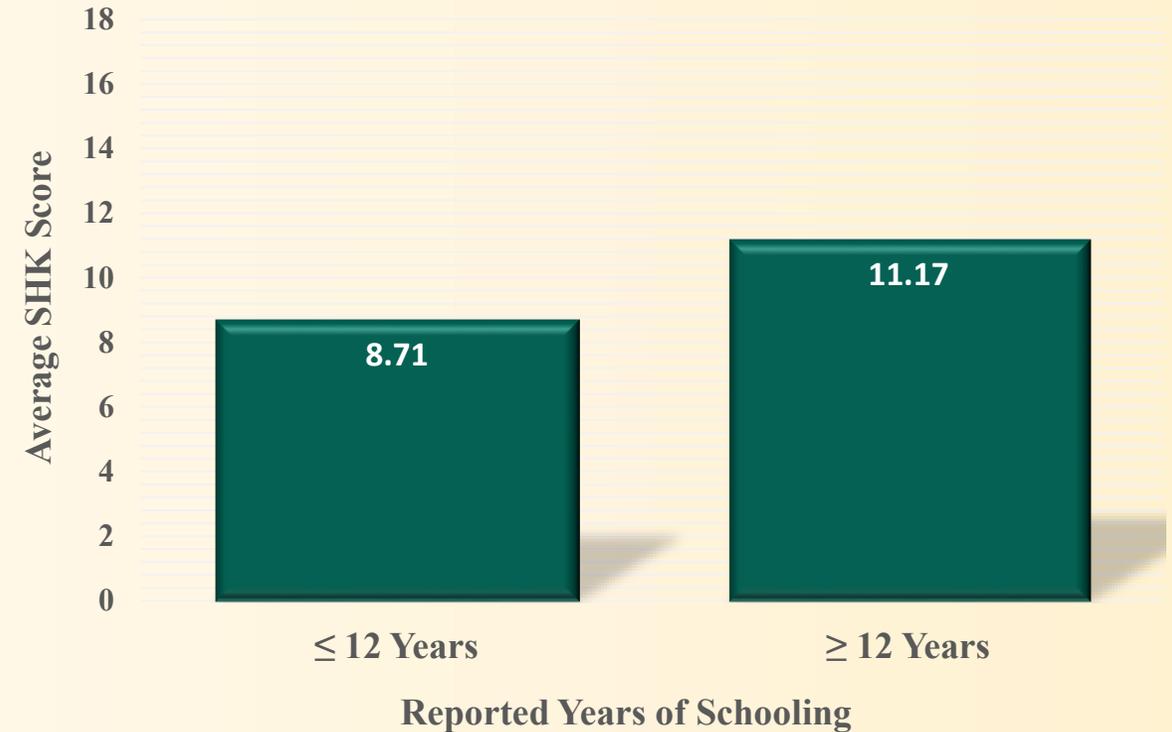


Results

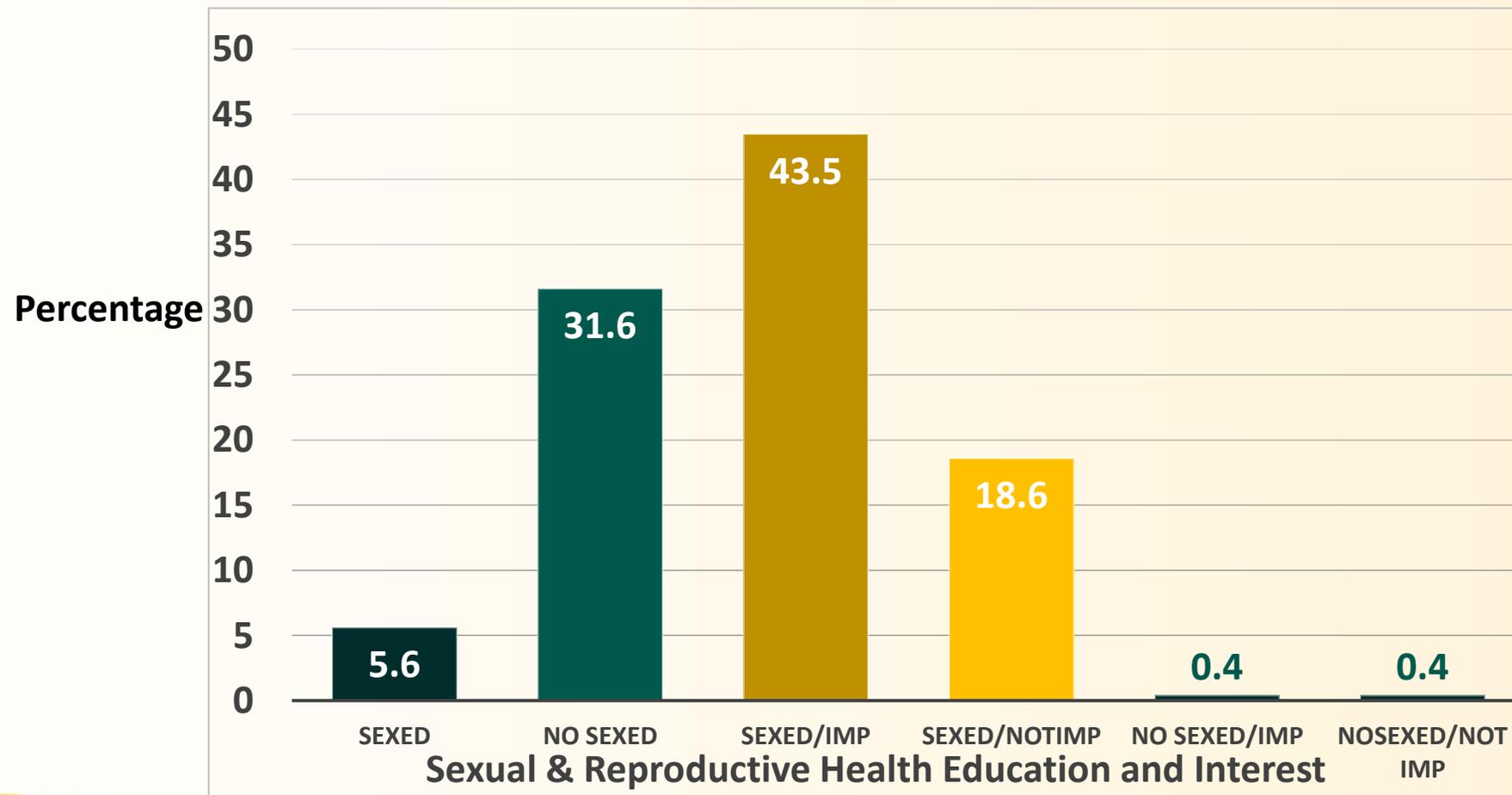
SHK Score by Total Years of Education
(P= 0.001)

Reported Years of Education	Mean SHK Score	N	Standard Deviation
Less than or equal to 12 years	8.71	89	3.39
Greater than 12 years	11.17	195	3.46

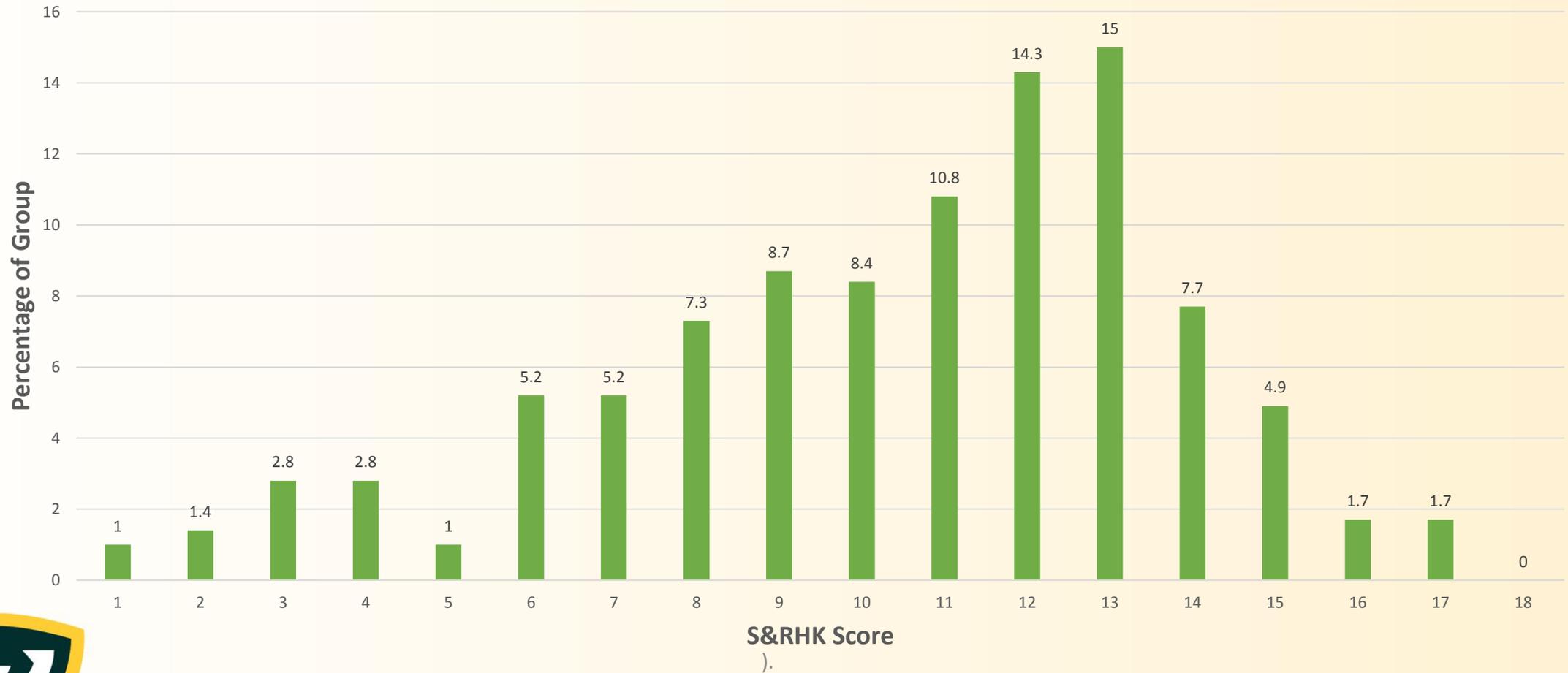
SHK Score by Total Years of Education



PRIOR S&RH EDUCATION AND SELF-EVALUATION OF IMPORTANCE



PERCENTAGE OF S&RHK SCORE



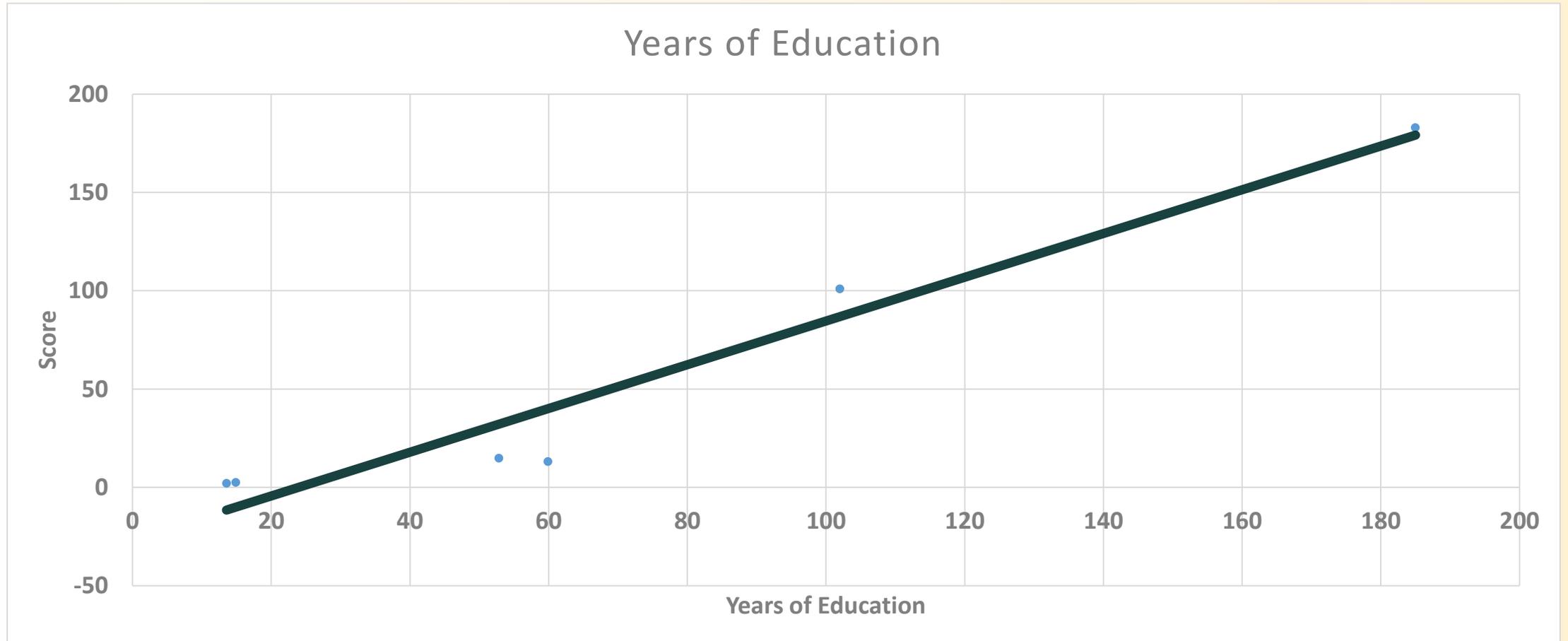
WOMEN IN THE STUDY BY AGE

Years of Ed	Pearson Correlation	.386**
	Sig. (2-tailed)	0
	N	284
Income	Pearson Correlation	.256**
	Sig. (2-tailed)	0
	N	278
Age	Pearson Correlation	-.193**
	Sig. (2-tailed)	0.001
	N	287

** . Correlation is significant at the 0.01 level (2-tailed).



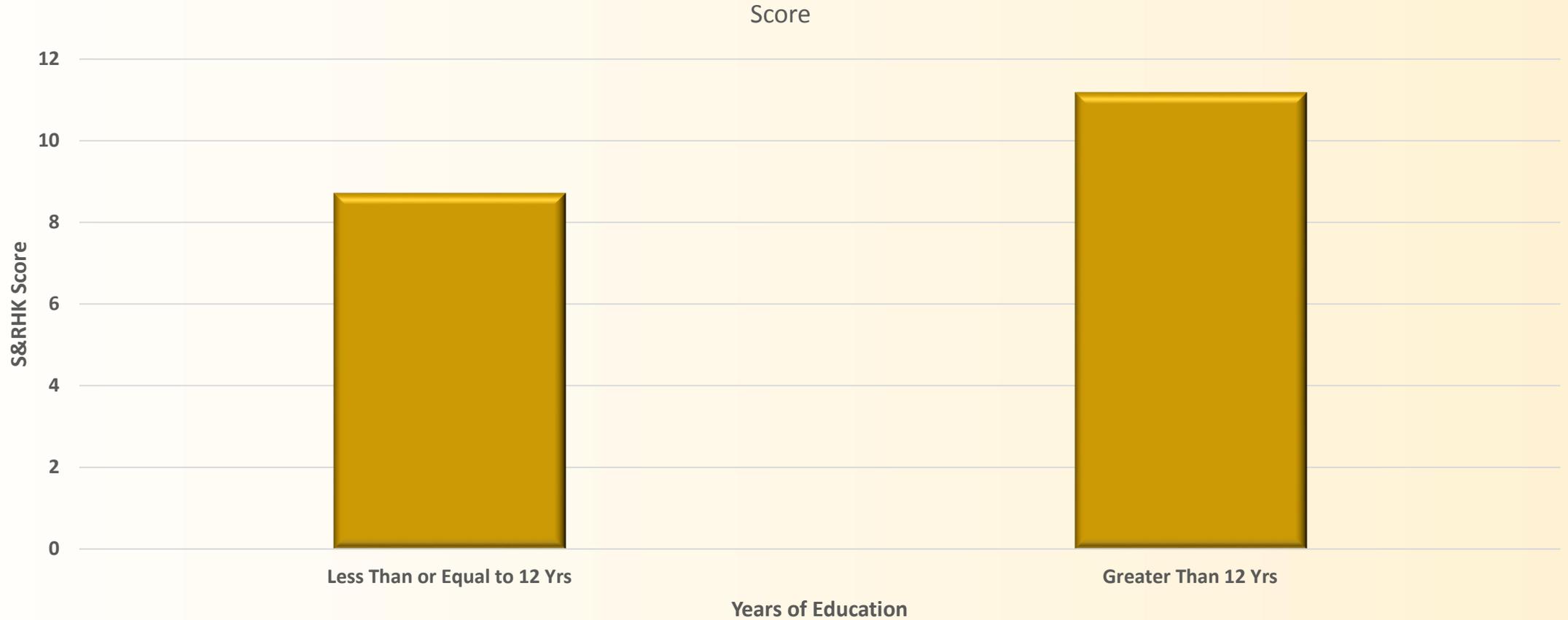
EFFECT OF EDUCATION ON S&RHK SCORE



** . Correlation is significant at the 0.01 level (2-tailed).



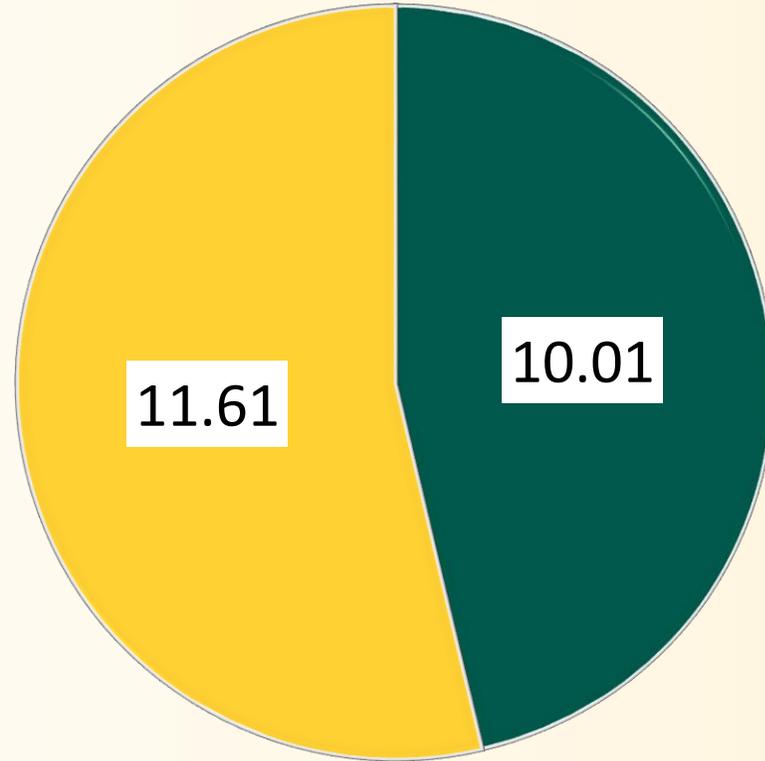
EFFECT OF EDUCATION ON S&RHK SCORE



** . Correlation is significant at the 0.01 level (2-tailed).



MEAN S&RHK SCORE BY INCOME



■ Less Than \$50,000 per year

■ Greater Than \$50,000 per year



MEAN S&RHK SCORE BY INCOME

- S&RHK was strongly associated with education and income: two SDOH.
- Older women, irrespective of income, were found to score lower. Educational attainment seemed to have been the discriminating factor in this demographic.
- All three may figure prominently into an assessment of the effects of social accountability (i.e. the micro-, meso-, and macro- elements of social determinants of health) on health outcomes.



Strengths & Limitations

- **Strengths**
 - **Relatively large sample size**
 - **Broad income and educational representation**
 - **Survey confidentiality ensured by research team throughout**
 - **Significant correlation between education level and S&RHK score**
 - **Significant correlation between income level and S&RHK score (though to a lesser extent)**
- **Limitations**
 - **Absence of Research Assistants on-site to do Exit Interviews**
 - **Incomplete or misunderstood information**
 - **Non-compliance with instructions on answering questions**
 - **Validation of the S&RHK survey tool in different demographics**
 - **Men**
 - **Non-African-American populations**
 - **Students**



Conclusion

- **S&RHK was strongly associated with education and income: two SDOH.**
- **Older women, irrespective of income, were found to score lower.**
- **Educational attainment seemed to have been the discriminating factor in this demographic.**
- **All three may figure prominently into an assessment of the effects of social accountability (i.e. the micro-, meso-, and macro- elements of social determinants of health) on health outcomes.**



References

- **A Systematic Review of Sexual Health Interventions for Adults - Narrative Evidence** *J Sex Res.* 2015; 52(4): 444–469. doi:10.1080/00224499.2014.973100 .
- **Illustrative Questionnaire for interview-Surveys with Young People** Cleland J
- **MEASURE Evaluation project.** United States Agency for International Development. “Sexual & Reproductive Health Knowledge”
https://www.measureevaluation.org/prh/rh_indicators/womens-health/arh/sexual-rh-srh-knowledge
- **Artiga, 2018. Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity.** <https://www.kff.org/racial-equity-any/issue-brief/beyond-health-care-the-role-of-sod-health-policial-determinants-in-promoting-health-and-health-equity/>
- **Practising Social Accountability From theory to action –Sandy Buchman**



Thank you for your attention!



WARRIOR STRONG



WAYNE STATE
UNIVERSITY