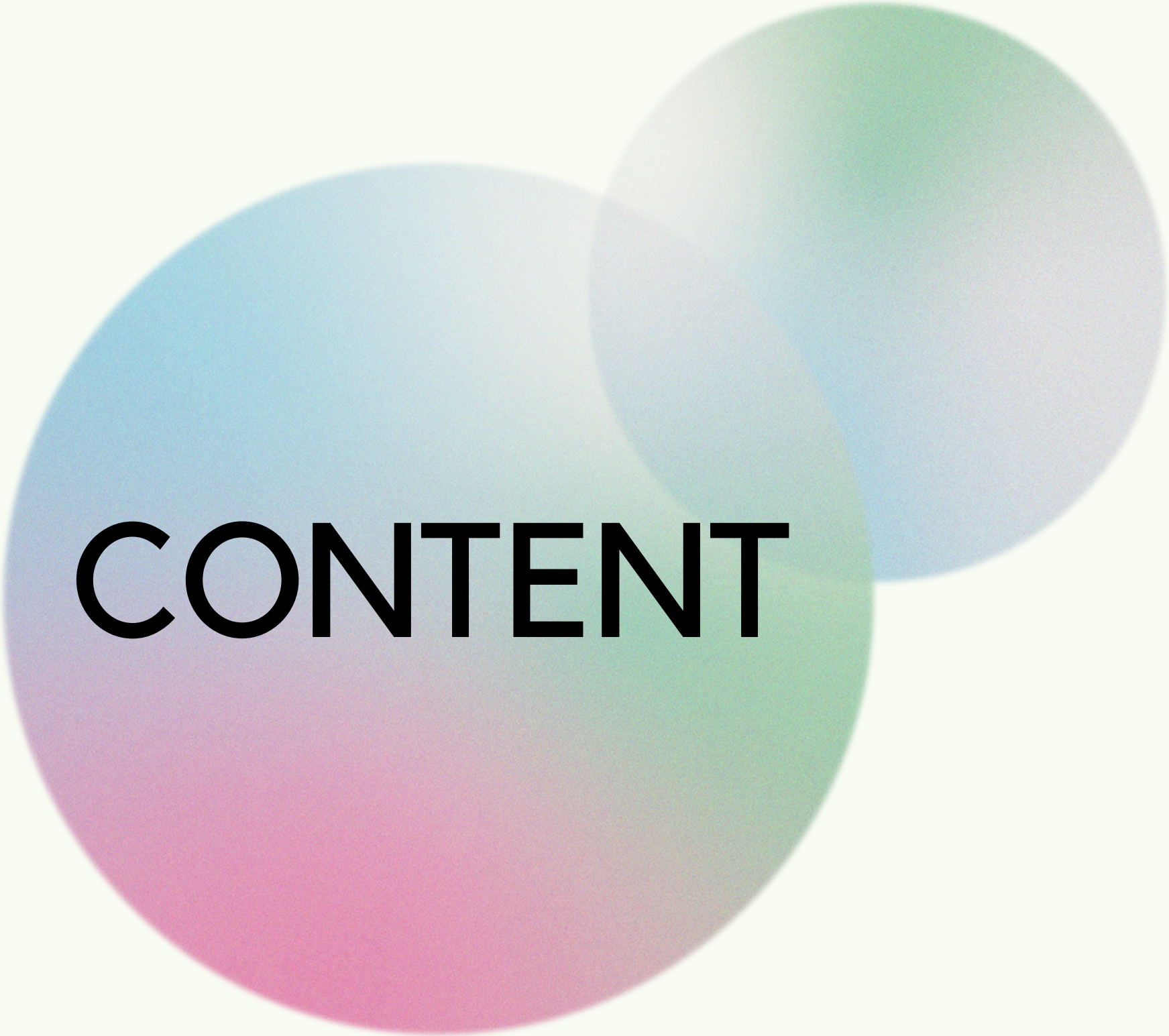


The Role of Age and Socioeconomic Factors in Contraceptive Use Among Senegalese Women

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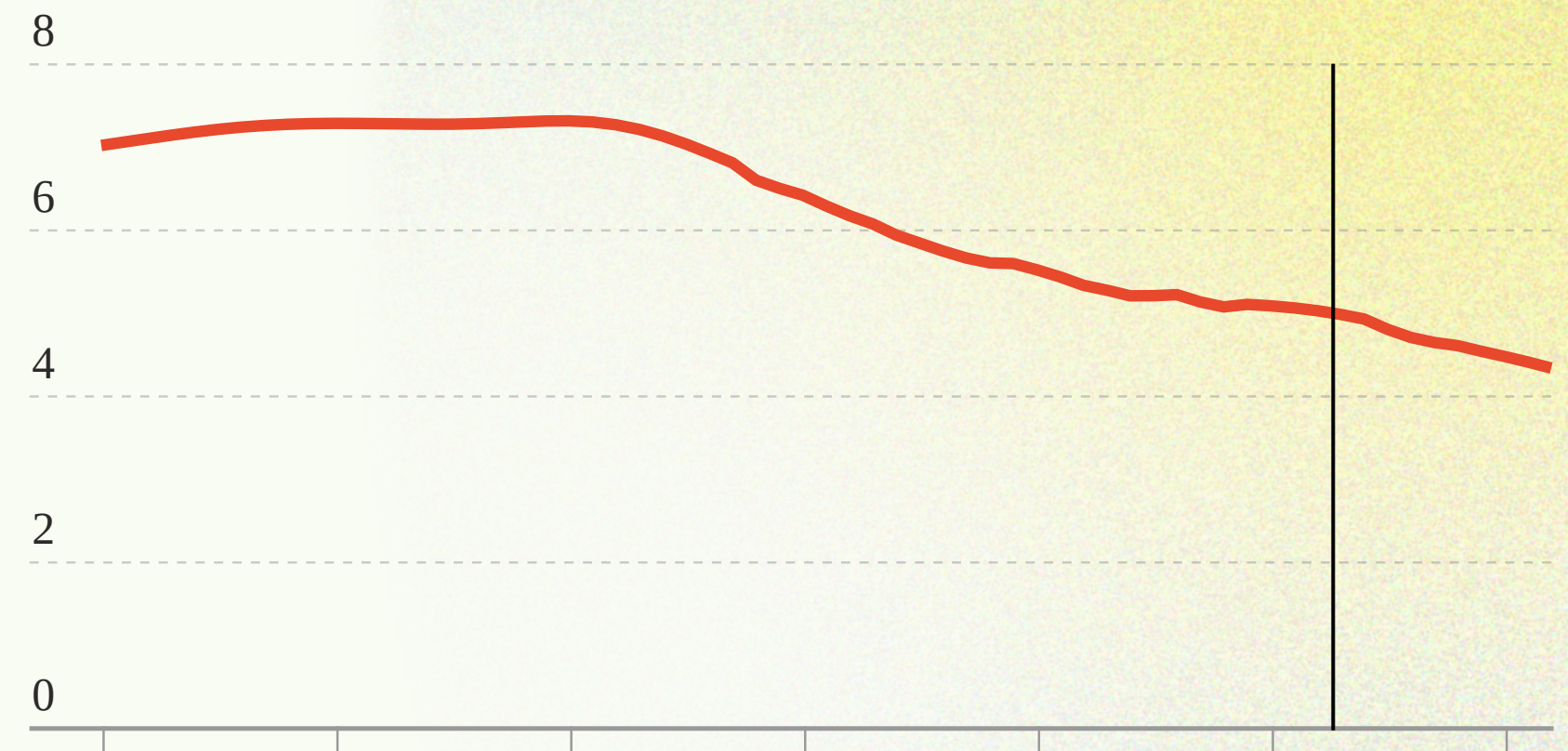
CONTENT

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Background

- Senegal's high fertility rate is a significant driver of maternal and child **health challenges** and a **barrier to social and economic development**.
- 25% of reproductive-age women wish to **delay or stop childbearing** but do not use contraception
- More than **60%** of Senegal's population is **under 25 years old**. They face compounded **barriers** which limit their access to contraceptives.

Fertility rate in Senegal



Data from datacatalog.worldbank.org via Data Commons

Literature Review

Studies consistently link higher education and household wealth with increased use of modern contraceptives, largely due to greater awareness and healthcare access.

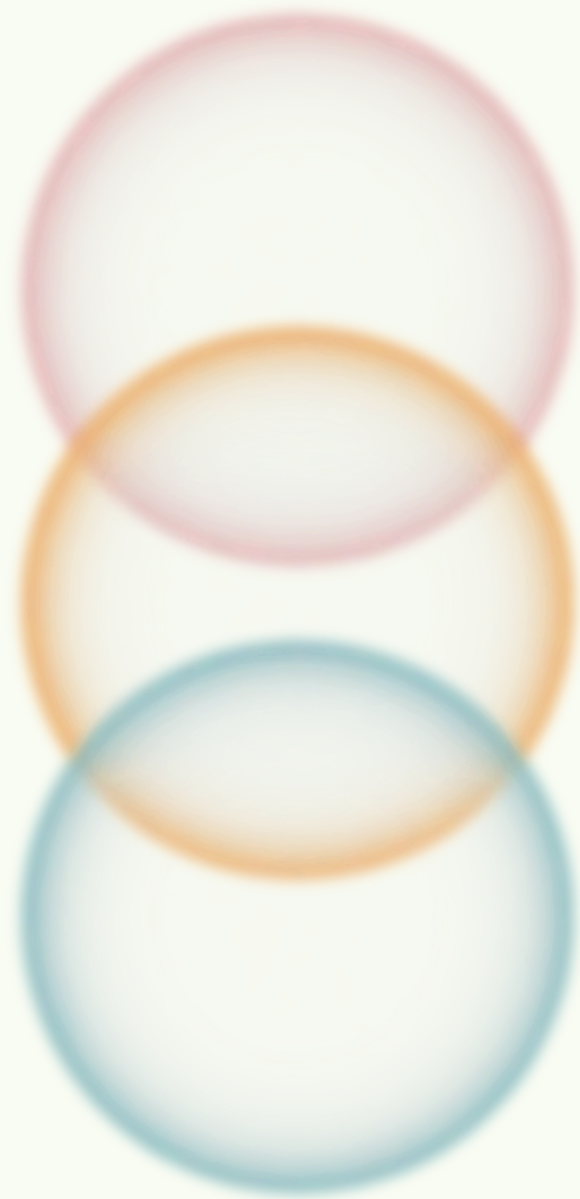
Younger women often benefit from targeted outreach and modern contraceptives' efficacy, while older women are more likely to rely on traditional or intermittent methods due to cultural norms and misconceptions about modern contraceptives.

1. Sidibe, Aissata Mahamadou et al. "Factors Impacting Family Planning Use in Mali and Senegal." International journal of environmental research and public health vol. 17,12 4399. 19 Jun. 2020
2. Zegeye, Betregiorgis et al. "Modern contraceptive utilization and its associated factors among married women in Senegal: a multilevel analysis." BMC Public Health vol. 21,1 231. 28 Jan. 2021

WHAT WE AIM TO UNDERSTAND

Does age influence contraceptive usage among women in Senegal, and how do access to resources and preferences for traditional versus modern contraceptive methods vary between younger women (ages 15–24) and older women (ages 25–49)?

Hypothesis



Age influences contraceptive usage among women in Senegal, resulting in clear differences driven by age groups, with older women being more likely to adopt contraceptive methods.

Null Hypothesis (H_0):

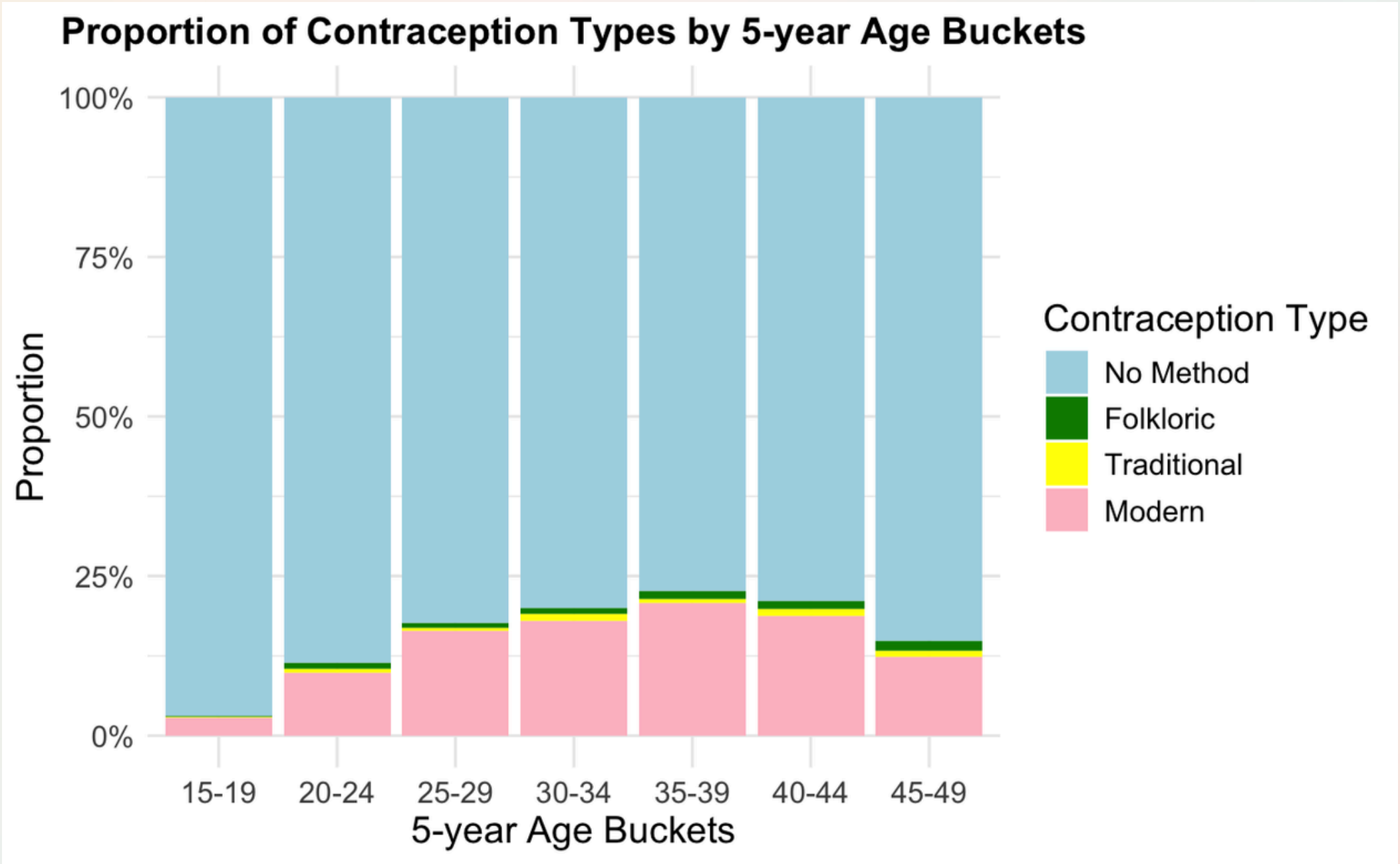
The null hypothesis assumes that there is no significant difference in contraceptive use between age groups.

Alternative Hypothesis (H_1):

The alternative hypothesis suggests that there would be clear differences driven by age groups, with older women being more likely to adopt contraceptive methods.

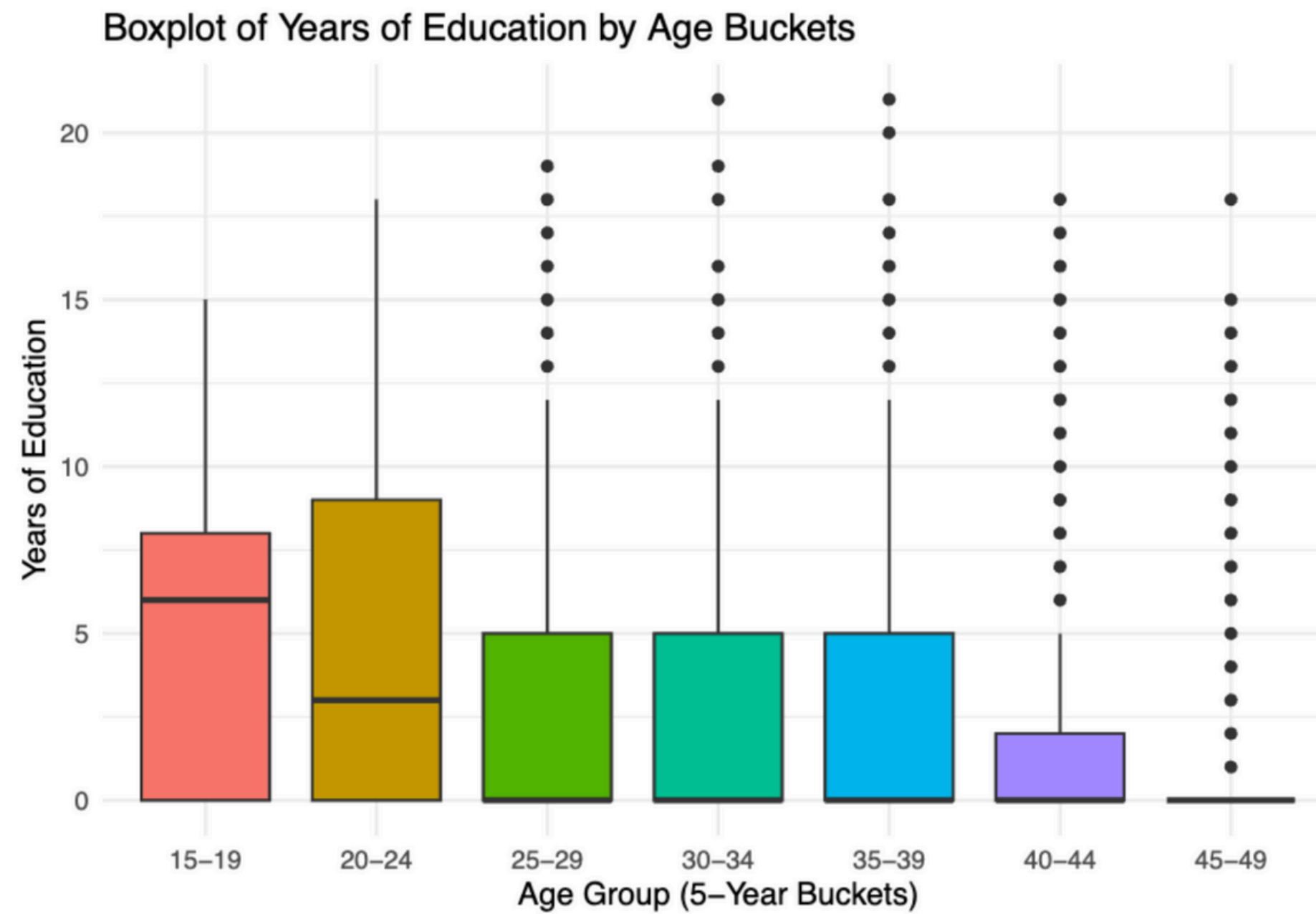
Data Trends

Figure 1



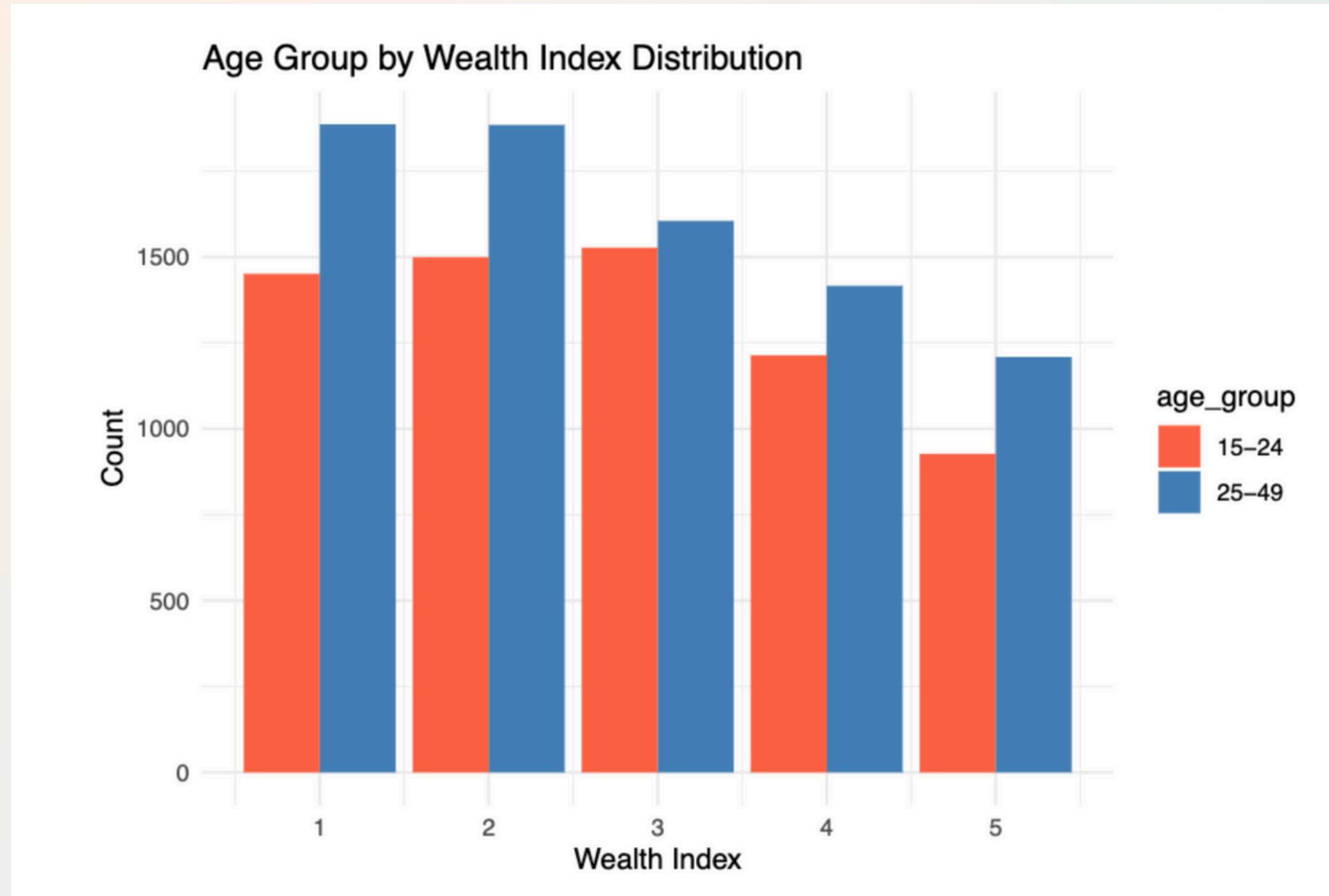
*This research utilizes the 2012-2014 Senegal Demographic and Health Survey (DHS-6) dataset

Figure 2



*This research utilizes the 2012-2014 Senegal Demographic and Health Survey (DHS-6) dataset

Figure 3



*This research utilizes the 2012-2014 Senegal Demographic and Health Survey (DHS-6) dataset

Findings

Table 1:

	Dependent variable
	Contraception usage
Women's Age Group 25-49	0.039*** (0.008)
Education in single years (v133)	0.009*** (0.001)
Wealth index (v190)	0.008*** (0.003)
Marital Status (v502)	0.048*** (0.006)
Urban/rural locality (v023)	0.049*** (0.007)
Total children ever born (v201)	0.026*** (0.002)
Ideal fertility (v613)	-0.011*** (0.001)
Constant	0.004 (0.012)
Observations	14,618
R ²	0.076
Adjusted R ²	0.075
Residual Std. Error	0.331 (df = 14,610)
F Statistic	171.286*** (df = 7; 14,610)
Note: *p<0.1; **p<0.05; ***p<0.01	

Table 2:

Contraception Use	Marital Status	Mean Ideal Fertility	Median Ideal Fertility	Mean Total Children	Median Total Children
Not Using Contraception	Currently/formerly in a union	5.91	6	3.34	3
	Never in a union	4.80	4	0.09	0
Using Contraception	Currently/formerly in a union	5.36	5	4.17	4
	Never in a union	4.50	4	0.76	1

Actual and ideal fertility by contraception use and marital status

Implications of Findings

1. **Age Group** Younger women, often at the beginning of their reproductive life, may feel less inclined or able to use contraceptives due to social norms, lack of access, or personal preference for natural family planning methods.

2. **Years of Education** Increased years of education, especially seen in the younger generations in Senegal likely influence contraceptive use due to more awareness and access to healthcare resources.

3. **Wealth Index** Wealth affords access to major health service options, including modern contraceptive methods, and reflects broader economic empowerment making wealthier women more likely to use contraceptives.

4. **Marital Status** In societies such as in Senegal where birth outside marriage has a low cultural acceptance, contraception is more often used for family planning within marital contexts.

5. **Urban/Rural Residence** Urban areas tend to have better access to family planning services, education campaigns, and healthcare infrastructure than do rural areas thus influencing this result.

6. **Total Children Ever Born** Women with more children can adopt contraception to limit further births.

7. **Ideal Fertility** Higher ideal fertility negatively correlates with contraceptive use, this reflects how cultural or personal preferences for larger families reduce contraceptive adoption.

Limitations

- **INTERNAL VALIDITY:**
 - Self-reporting bias -> error of social desirability, or recall error
 - Omitted variable bias (OVB)
 - Multicollinearity
 - Reverse Causality
- **LINEAR MODEL**
- **EXTERNAL VALIDITY**
 - Time trends
 - Not generalizable to other countries

Recommendations

Family planning programs should target younger age women (ages 15-24) by informing them through education about the means and use of contraceptives. The cost of contraceptives can be subsidized, with increased access to healthcare services in socio-economically disadvantaged areas, especially in rural areas where contraception use is limited for all age buckets.



Thank you!

Do you have any questions?