Kerra SINANAN
Homework 7
Lab 7
Group: Irania, Nancy Reyes Soto, Keyla Pereira, Kerra Sinanan, Heidy Collado.

We decided to see the factors associated with a man being at least 10 years older than his female partner. We focus on traditional different-sex couples (female respondent and male partner) and define the dependent variable y=1 if the man is 10+ years older, and 0 otherwise; a tabulation of age difference confirms that this coding is correct.

We estimate several Linear Probability Models to examine how education, age, and location relate to this outcome. The first model uses education dummies for the woman and includes her age, the second uses approximate years of schooling for both partners, and the third treats both partners' education as factors. Two additional models add geographic controls using STATEFIP and REGION to test whether location helps explain variation in age-gap relationships.

Coefficients in these models reflect changes in probability (0–1), so multiplying by 100 gives percentage-point effects. Because y=1 indicates the man is much older, positive coefficients increase the likelihood of a large age gap. I also test whether geographic variables matter jointly, and rejection of the null indicates meaningful regional or state-level differences.

To support the regression results, I include figures showing how the probability varies by women's education and across states, demonstrating both educational and geographic patterns in age-gap relationships.
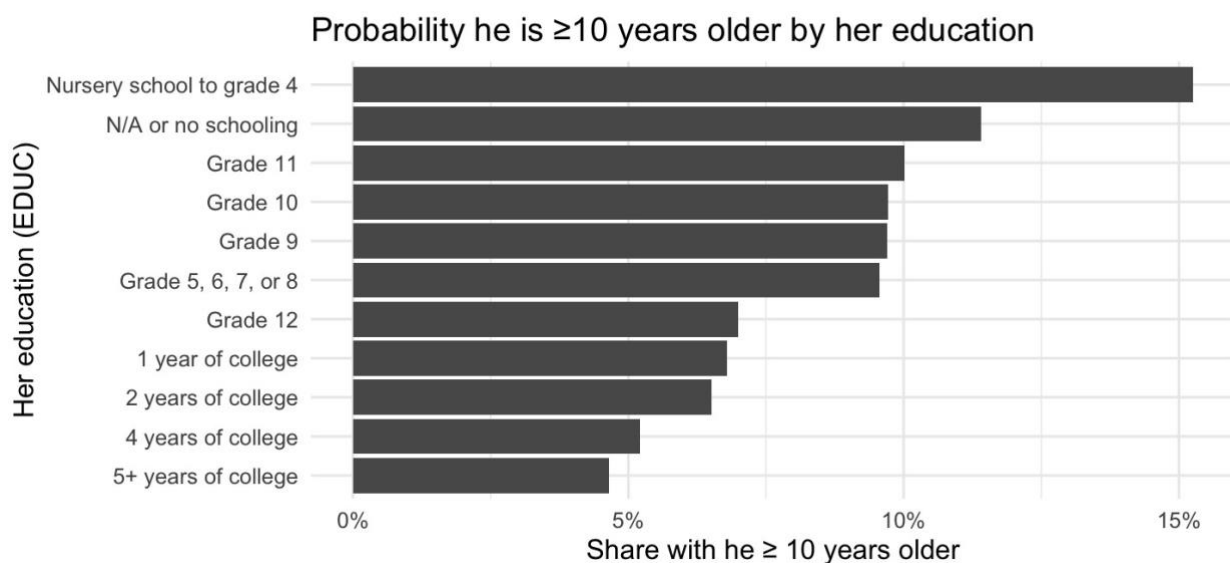

Probability he is ≥10 years older by her education

Figure 1: Probability he is ≥10 years older by her education

This figure shows that large age gaps are more common among women with lower levels of education, and the likelihood declines steadily as the woman's education increases.
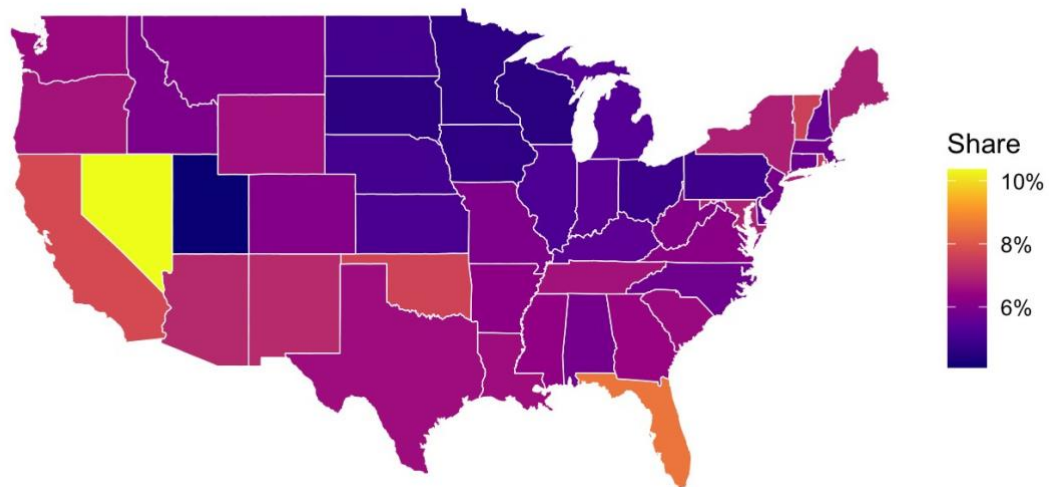

Share of couples where he is ≥10 years older

Figure 2: Share of couples where he is ≥10 years older (U.S. map) and Southern states showing higher rates and- many Northeastern and Midwestern This map illustrates geographic variation in agegap relationships, with several Western states showing lower rates.
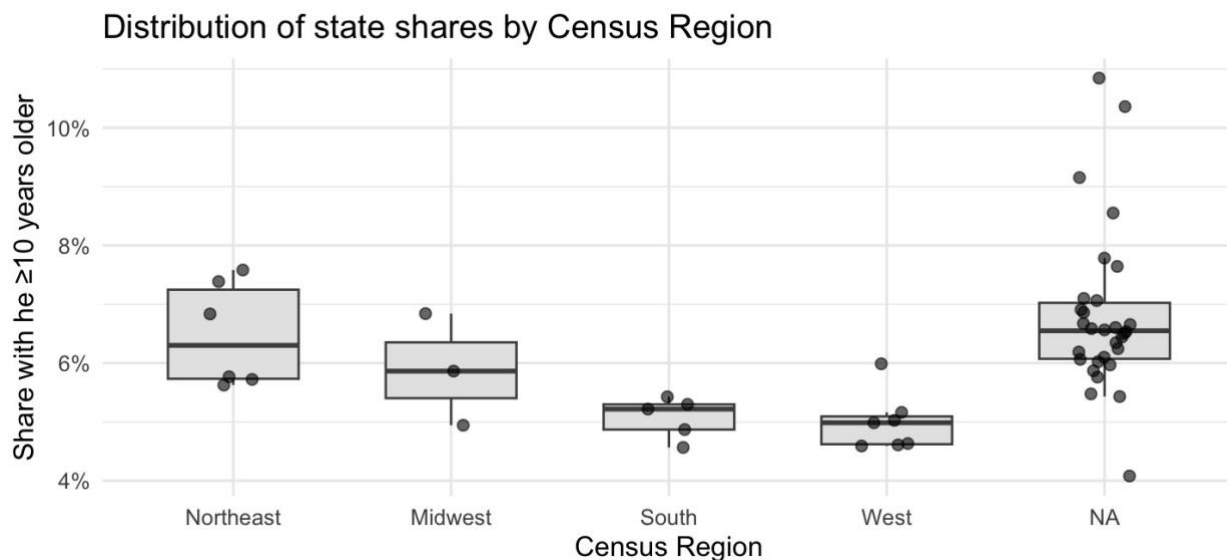
Figure 3: Distribution of state shares by Census Region
This boxplot summarizes differences across regions, indicating slightly higher rates of large age gaps in the South and West compared to the Midwest and Northeast.
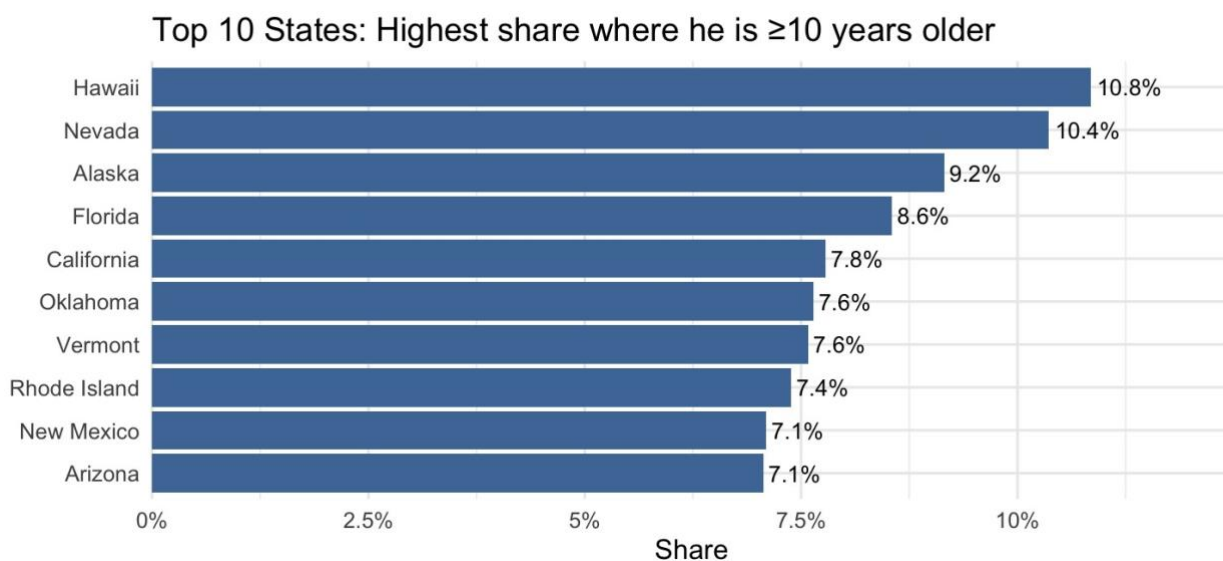

Figure 4: Top 10 states with the highest share where he is ≥10 years older
This ranked chart highlights the states with the largest agegap prevalence, with

Hawaii,

Nevada, Alaska, and Florida among the highest. -

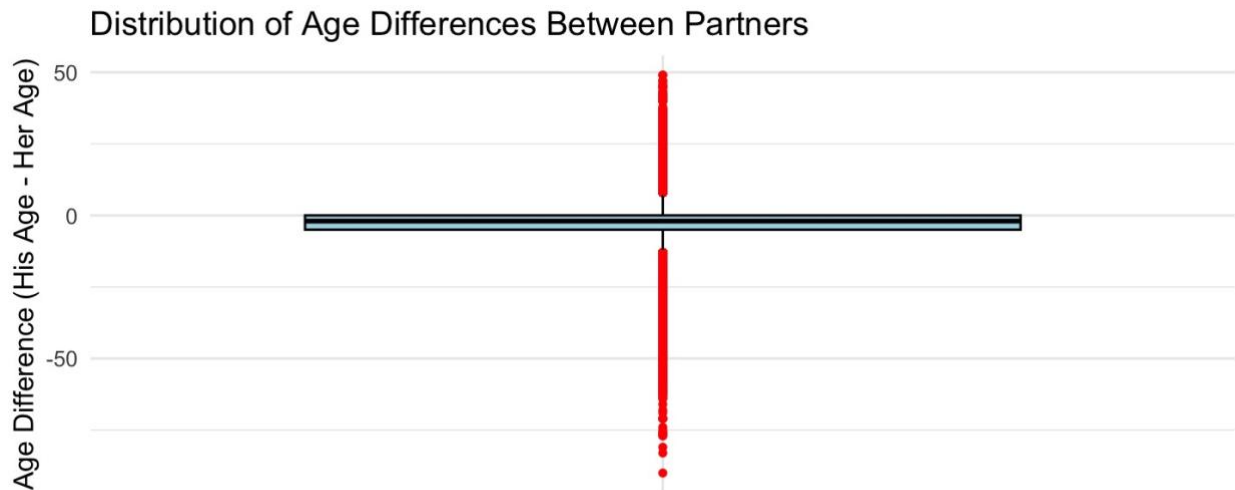## Distribution of Age Differences Between Partners

Figure 5: Distribution of Age Differences Between Partners
This boxplot summarizes the distribution of age differences between partners. The middle line inside the box represents the median age gap, while the box itself shows the interquartile range (IQR), which contains the middle 50% of couples. The whiskers extend to typical minimum and maximum values, and the red dots indicate outliers—couples with unusually large age differences in either direction. Overall, this plot shows that most couples have small age gaps, with a few extreme cases where one partner is much older.

Topic : Fashion brand Effect on customer rating

Article 1 : Link: https://www.sciencedirect.com/science/article/pii/S0969698918307424

(This is a peer-reviewed article on luxury brand value + consumer attitudes.)

Summary

This study investigates how brand authenticity, heritage, and perceived exclusivity directly influence consumer trust and satisfaction in luxury fashion. It finds that consumers rate luxury brands higher when the brand signals craftsmanship, heritage storytelling, and a consistent identity across touchpoints. The paper emphasizes that luxury customers care less about the functional quality and more about the symbolic value—status, uniqueness, tradition. Consumer ratings rise when the brand's actions match its claimed identity. The study also warns that over-expansion and too much accessibility weaken authenticity, which can pull ratings down.

Key idea:

Luxury ratings rise when the brand stays true to its identity, maintains exclusivity, and leans into heritage storytelling.

Article 2

Link: https://journals.sagepub.com/doi/10.1177/0047287519852594

(Published in Journal of Travel Research, covering luxury retail experience + customer satisfaction.)

Summary

This article explores the impact of in-store luxury experience and brand experiential cues on customer satisfaction and reviews. It finds that brand experience — store design, scent, ambiance, service quality, personalization — has a stronger impact on customer ratings than the actual product itself. Essentially, customers give higher ratings when they feel immersed in the luxury world the brand creates. The research also highlights that emotionally engaged customers (those who feel "seen," recognized, or valued) leave significantly higher online ratings and show higher loyalty.

Key idea:

The luxury experience (service tone, atmosphere, personalization) is more important for ratings than the product, especially in brands like Louis Vuitton, Chanel, etc.