

Review of Factors Associated with Asian American Colorectal Cancer Screening Rates

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Introduction

- Asian Americans are the **fastest growing racial group** in the United States, with their population projected to surpass 46 million by 2060, a 130% increase (Budiman & Ruiz, 2022)
- Asians are the **only** United States racial group where cancer is the leading cause of death in **both** males and females (Lee et al., 2021)
- Colorectal cancer incidence among Asian Americans is **lower** than non-Hispanic whites, yet mortality is **higher** (Lee et al., 2021)
- Overall, Asian Americans **remain severely underrepresented in colorectal cancer screening** compared to other racial groups

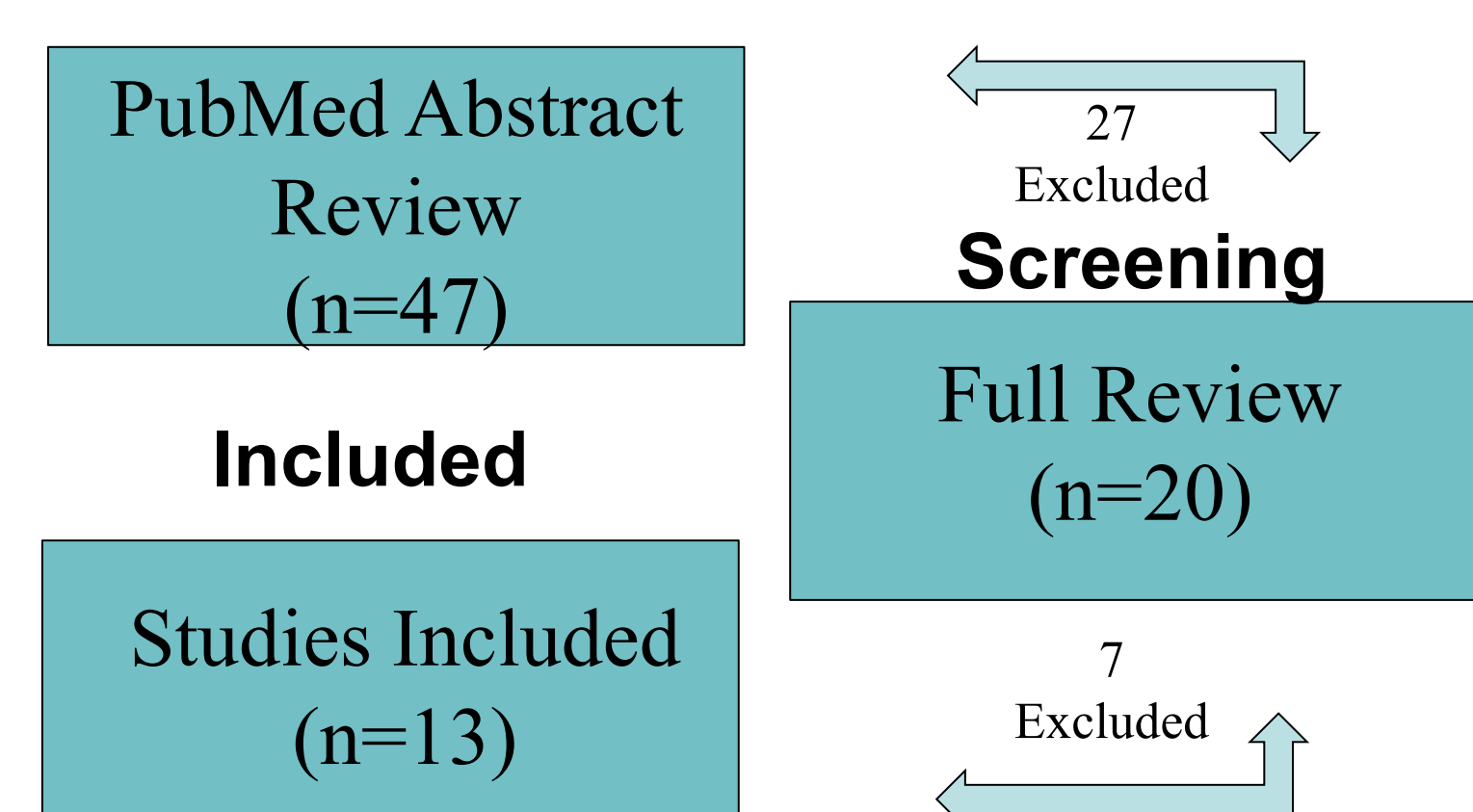
Thus, **the goal of this study** was to review the multiple levels of influences- individual (e.g., psychological), clinical (e.g., physician), cultural, and healthcare- associated with Asian American colorectal cancer screening rates.

Methods

- An initial PubMed database search yielded **47 results** matching the formulated search term
- 20 papers were deemed eligible** for further review following abstract review. Of the 27 papers deemed ineligible:
 - n=17 (Not focused on factors)
 - n=6 (Not focused on Asians)
 - n=4 (Physician/Provider focus)
- 13 papers were deemed eligible** following full paper review. Of the 7 papers deemed ineligible:
 - n=6 (No explicit measure of screening behaviors)
 - n=1 (Review article)

A total of **13 papers** were coded across **5 domains**: demographic factors, psychological factors, physician factors, healthcare access, and cultural factors.

Figure 1: Database Search Flowchart



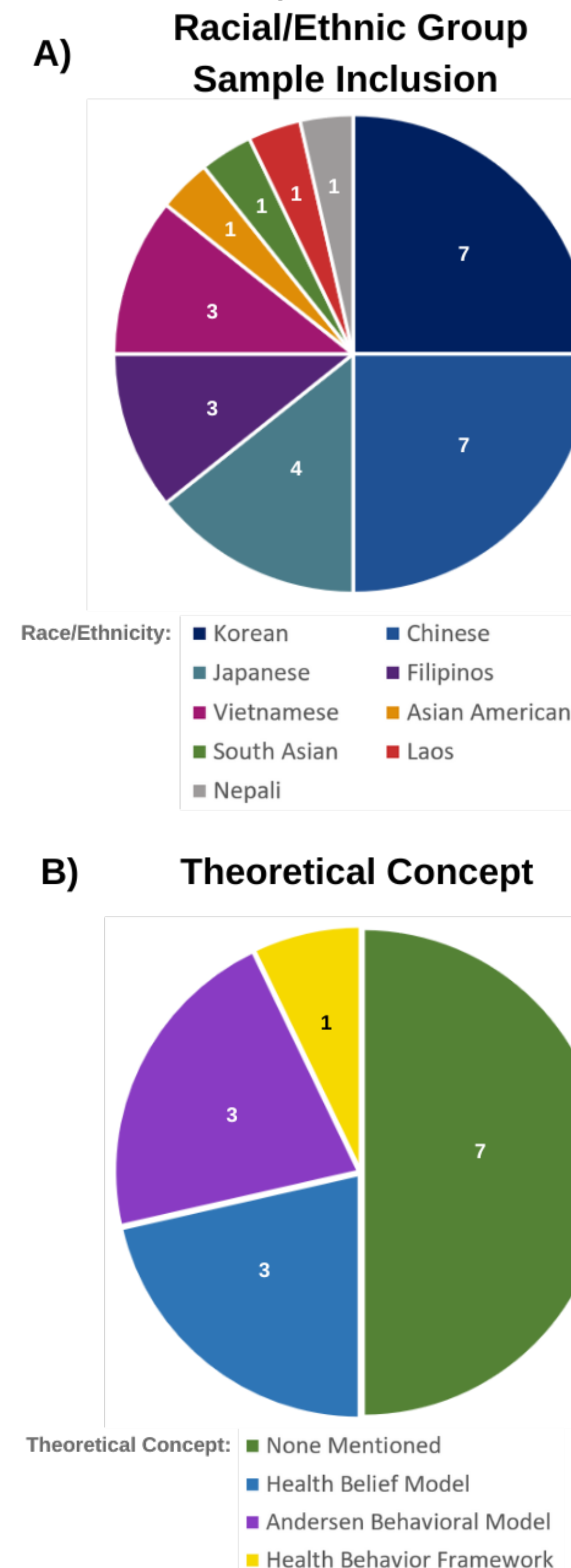
Results

Table 1: Characteristics of the Included Studies

| Paper | Author (first) | Publishing Year | Sample Size | Race/Ethnicity | Sex | Theoretical Concepts |
|-------|---------------------|-----------------|-------------|--|---------------|--|
| 1 | Keiko Honda | 2004 | 360 | 100% Japanese | 38.6% Female | Andersen Behavioral Model and Health Belief Model |
| 2 | Sabrina T Wong | 2005 | 19,489 | 90.91% White 1.64% Vietnamese 1.31% Korean 1.92% Japanese 0.76% South Asian 1.44% Filipino 2.02% Chinese | 53.99% Female | Andersen Behavioral Model |
| 3 | Judy Hwei-Yu Wang | 2006 | 433 | 100% Chinese | 100% Female | None Mentioned |
| 4 | Mei-Po Yip | 2006 | 383 | 100% Chinese | 63.2% Female | None Mentioned |
| 5 | Angela M Jo | 2008 | 151 | 100% Korean | 68% Female | Health Behavior Framework (Health Belief Model, Theory of Reasoned Action/Planned Behavior, Precede Model) |
| 6 | Judith Walsh | 2009 | 808 | 100% Vietnamese | 65% Female | None Mentioned |
| 7 | Hee Yun Lee | 2013 | 281 | 100% Korean | 45.6% Female | Health Belief Model |
| 8 | Caroline A Thompson | 2014 | 20,793 | 45% Chinese 23% Asian American 16% Filipinos 9% Japanese <5% Other | 55% Female | None Mentioned |
| 9 | Linda K Ko | 2016 | 193 | 100% Korean | 63% Female | None Mentioned |
| 10 | Tsu-Yin Wu | 2017 | 217 | 13% Chinese 11.6% Vietnamese 5.8% Korean 15.9% Japanese 12.6% Laos 17.4% Nepali 23.7% Filipino | 59.7% Female | None Mentioned |
| 11 | Jane Jih | 2018 | 725 | 100% Chinese | 81.1% Female | Andersen Behavioral Model |
| 12 | Mary Y Jung | 2018 | 120 | 50.8% Korean, 49.2% Chinese | 60.8% Female | Health Belief Model |
| 13 | Shin Young Lee | 2018 | 210 | 100% Korean | 61% Female | None Mentioned |

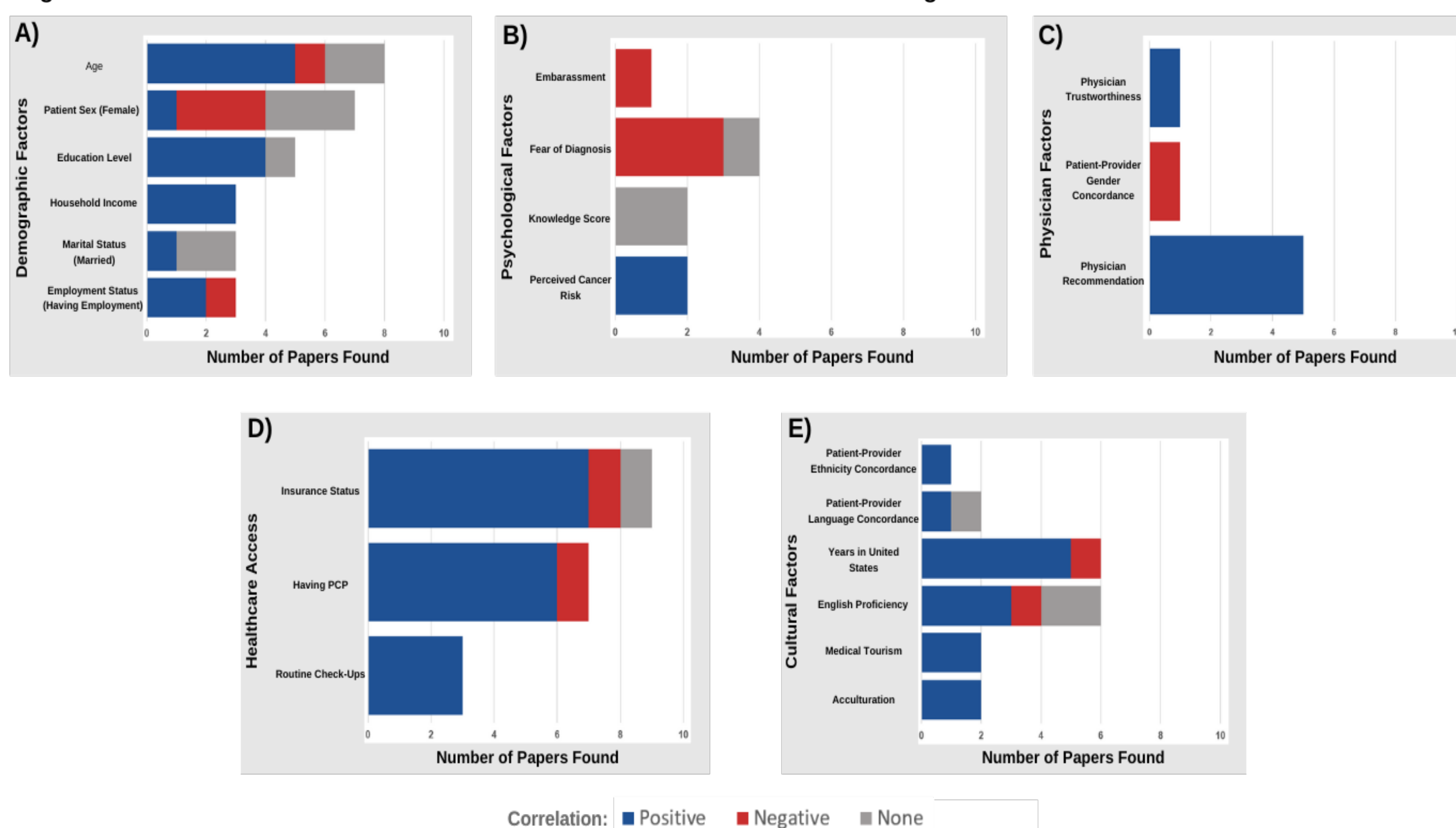
Note: All included studies were cross-sectional

Figure 2: Racial/Ethnic and Theoretical Concept Inclusion



Note: Charts do not add up to 13 because some studies included multiple races/ethnicities and theoretical concepts

Figure 3: Characteristics and Their Associations with Colorectal Cancer Screening



Conclusions/Discussions

- Overall findings show that **multiple levels of influence** appear associated with Asian American colorectal cancer screening rates
- Access to healthcare and a physician recommendation were associated with **higher rates** of screening as is seen among other racial groups
- Being more acculturated, or adapted to life in the United States, was shown to be associated with **higher rates** of Asian American screening compliance. However, we know that the acculturation paradox can **negatively impact** other health outcomes, so further research is needed
- Knowledge score was shown to **not be associated** with Asian American colorectal cancer screening
- Healthcare access and psychological factors are important, but knowledge alone **may not be enough** to promote changes in Asian American colorectal cancer screening behavior
- Over half the studies had no guiding theoretical concept, something important to incorporate in future studies
- Knowing this, it is important to consider physician and provider involvement to ensure meaningful steps are taken to squash this disparity
- Limitations:**
 - Only PubMed was searched due to time constraints
 - Only 1 person coded the data meaning inter-rater reliability was not possible
 - Asians are very heterogeneous, and only 13 papers were reviewed, so no unique factors could be identified for each racial group

References

- Budiman, A., & Ruiz, N. G. (2022, February 16). Key facts about Asian Americans, a diverse and growing population. Pew Research Center. Retrieved August 1, 2022, from <https://www.pewresearch.org/fact-tank/2021/04/29/key-facts-about-asian-americans/>
- Lee, R., Yu, E., Posadas, E., Kim, J., & Madan, R. (2021, March 8). Disparities in cancer care and the Asian American population. Retrieved August 1, 2022, from <https://theoncologist.onlinelibrary.wiley.com/doi/10.1002/onco.13748>

Acknowledgments

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