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Jan Bietenbeck Lukas Maschmann Therese Nilsson Devon Spika

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Jan Bietenbeck Lund University and IZA

Lukas Maschmann

Lund University

Therese Nilsson

Lund University and Research Institute of Industrial Economics

Devon Spika *University of Zurich*

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ABSTRACT

Cultural Origins of Preventive Health Care Utilization*

We examine whether culturally transmitted time and risk preferences help explain differences in preventive health care uptake. We combine individual-level survey data from 27 European countries with country-level preference measures from the Global Preferences Survey. To isolate cultural influences from institutional and economic confounders, we focus on second-generation immigrants, who were born and currently reside in the same country -- and thus face the same institutional environment and health care system -- but whose parents originate from culturally distinct countries. We find that descendants of more patient cultures are more likely to use preventive services, while those from more risk-taking cultures are less likely to do so. These associations appear across multiple preventive care outcomes and remain robust to a wide range of socio-demographic and country-of-origin controls. The results highlight the role of culturally shaped preferences as a subtle but systematic determinant of preventive health behavior.

Keywords: preventive care, culture, patience, risk-taking

Corresponding author:

Jan Bietenbeck Lund University Department of Economics P.O. Box 7080 220 07 Lund Sweden

E-mail: jan.bietenbeck@nek.lu.se

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1 Introduction

Preventive care is a cornerstone of modern healthcare systems. Services such as vaccinations, routine check-ups, and screenings help reduce morbidity and mortality by enabling early detection and timely treatment (Maciosek et al., 2006; OECD, 2020). Yet despite these well-documented benefits, uptake remains incomplete even in health care systems with universal coverage and no out-of-pocket costs (e.g., Carrieri and Bilger, 2013; Patel et al., 2020). Understanding why many individuals forgo preventive care is crucial for designing effective health policy and for reducing avoidable health burdens, but the underlying drivers are not yet fully understood.

This paper examines whether cultural heritage helps explain individual variation in preventive care uptake.² Specifically, we focus on the role of culturally transmitted time and risk preferences. These preferences are likely relevant because preventive services often involve immediate inconvenience, discomfort, and time investment in exchange for probabilistic health gains that may materialize only in the future, a trade-off that lies at the core of many health-related decisions. This intuition is formalized in standard models of health investment, where more patient individuals are more willing to bear short-term costs for long-term benefits, and more risk-averse individuals are more likely to adopt preventive behaviors to reduce uncertainty about future health outcomes (e.g., Grossman, 1972; Picone et al., 1998).

Identifying the influence of culturally transmitted preferences on preventive care use is empirically challenging, as culture is correlated with institutional quality and economic conditions. To address this challenge, we adopt the widely used *epidemiological approach* pioneered by Fernández and Fogli (2009) and Fernández (2011). The core idea of this approach is that when people emigrate, they leave behind their original institutional and economic environment but retain elements of their native culture, which they then transmit to their children.³ Therefore, by focusing on second-generation immigrants who were born, raised, and currently reside in the same country, but whose parents come from culturally distinct backgrounds, we can isolate the influence of cultural heritage on preventive care use from the surrounding institutional and economic context.

¹Preventive services do not necessarily save money; rather they can be viewed as a form of insurance that involves certain upfront costs in exchange for uncertain future payoffs (Newhouse, 2021).

²Culture can be defined as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation" (Guiso et al., 2006). Cultural heritage has been shown to influence mental health (Casabianca and Kovacic, 2024) and long-term care decisions (Gentili et al., 2017), as well as economic behaviors outside the health domain such as educational investment (e.g., Figlio et al., 2019; Hanushek et al., 2022; Hartinger et al., 2024), labor market choices (e.g., Bietenbeck et al., 2024; Fernández and Fogli, 2009), entrepreneurship (Jonsson and Ouyang, 2023), and financial risk-taking (Ek et al., 2023).

³For a theoretical framework on the transmission of culture across generations, see Bisin and Verdier (2001, 2025), who model how parents purposefully socialize their children to transmit cultural traits.

We implement the epidemiological approach using individual-level data from the Survey of Health, Ageing and Retirement in Europe (SHARE), which covers individuals aged 50 and above. This population is well suited for studying preventive care uptake, as they are directly targeted by public health recommendations. We focus on four preventive services observed in the data: flu vaccination, eye examination, colon cancer screening, and mammography. These measures are especially relevant for older adults, as they target conditions that become increasingly common with age and that have substantial downstream effects on health, functioning, and independence. For example, influenza remains a leading cause of hospitalization and mortality in later life (Marchi et al., 2023), while vision impairment is linked to declines in physical and social functioning and to higher risks of falls and frailty (Christ et al., 2014; Ehrlich et al., 2021; Varadaraj et al., 2022). Consistent with this, most European countries recommend seasonal influenza vaccination for individuals aged 65 and older and routine breast and colorectal cancer screening starting at age 50 (Ebell et al., 2018; Mereckiene, 2018; Ren et al., 2022; Schreuders et al., 2015). The WHO also recommends regular eye examinations for adults aged 50 and above (World Health Organization, 2022).

Our outcomes are binary indicators for whether a respondent used each of the four preventive services. In addition, we construct a summary index of preventive care utilization. This index improves statistical power when effects are expected to move in the same direction and mitigates concerns about multiple hypothesis testing across the individual services. To measure culturally transmitted preferences, we draw on the Global Preferences Survey (GPS), which provides experimentally validated measures of patience and risk-taking for nationally representative samples in 76 countries. Using information in SHARE on both respondents' and their parents' countries of birth, we restrict the sample to second-generation immigrants and assign to each individual the average levels of patience and risk-taking in their parents' country of origin.

Our regressions relate preventive care use to culturally transmitted patience and risk-taking, controlling flexibly for age and country-of-residence fixed effects. We find that respondents with more patient cultural backgrounds are more likely to use preventive care, whereas those from more risk-tolerant backgrounds are less likely to do so. These patterns appear consistently across outcomes.⁴ For example, a one standard deviation (SD) increase in culturally transmitted patience is associated with a 2.2 percentage point (pp) increase in influenza vaccination, while a one SD increase in culturally transmitted risk-taking is associated with a 3.2 pp decrease. For the summary index, a one SD increase in patience is associated with a 0.081 SD increase, and a one SD increase in risk-taking

⁴For mammography, the coefficient on patience is negative but not statistically significant. The association with risk-taking is consistent with the other outcomes.

with a 0.069 SD decrease. These findings suggest that culturally transmitted preferences modestly but systematically influence individual decisions to take up preventive care.

In additional analysis, we examine heterogeneity by gender and probe the robustness of our findings. The general pattern – that patience is positively associated with preventive care use and risk-taking is negatively associated – holds for both women and men, although the associations tend to be stronger for women. Regarding robustness, the estimates remain stable when controlling for potential confounders at both the individual and country-of-origin level, as well as when using alternatively defined preference measures based on the Global Preferences Survey.

This paper contributes to a large literature on the determinants of preventive care utilization. Descriptive studies commonly find that individuals with higher income and education are more likely to use preventive services (e.g., Cutler and Lleras-Muney, 2010; Jain et al., 2017; Quintal and Antunes, 2022; Walsh et al., 2012), although exceptions exist (e.g., Patel et al., 2020). Causal evidence shows that expanding insurance coverage (Baicker et al., 2013; Simon et al., 2017; Soni, 2020), mandating coverage of preventive services (Bitler and Carpenter, 2016), and interventions that increase awareness of their benefits (Kacker et al., 2022) can each raise uptake. To our knowledge, no previous study has examined the role of cultural heritage in shaping preventive care decisions.

Our paper also contributes to research linking individual time and risk preferences to health behaviors. Most existing studies focus on risky or protective behaviors rather than preventive care. More patient individuals are consistently found to be less likely to smoke, consume alcohol, or be obese (e.g., Chen, 2013; Golsteyn et al., 2014; Norrgren, 2022; Sutter et al., 2013), while more risk-tolerant individuals are more likely to engage in these behaviors (e.g., Anderson and Mellor, 2008; Dohmen et al., 2011; Falk et al., 2018). A notable exception is Picone et al. (2004), who find that more patient individuals are more likely to undergo breast cancer screening in the United States. We extend this literature by examining multiple preventive services, focusing on culturally transmitted (rather than individually elicited) preferences, and applying a research design that isolates the influence of preferences from institutional and economic confounders, such as characteristics of different health care systems.

Finally, our paper relates to, and provides complementary insights for, the literature on the implications of preventive screenings. Each of the preventive services we examine is relevant for older adults and has been linked to important downstream health outcomes. Influenza vaccination remains one of the most effective and well-documented strategies for reducing influenza-related morbidity and mortality among older adults, consistently shown to lower the risk of severe illness, hospitalization, and death (Brilli et al., 2020; Ferdinands et al., 2024; Marchi et al., 2023). Evidence on population-based cancer screening

is more mixed, with some studies documenting reductions in cancer-specific mortality but little effect on overall mortality (Bretthauer et al., 2022; Kowalski, 2021; Nelson et al., 2016). Routine eye examinations can facilitate early detection of vision changes associated with age-related macular degeneration, glaucoma, cataracts, and other common causes of visual decline in later life (Mangione et al., 2022; Al-Namaeh, 2022; Vitale et al., 2006). While our analysis does not evaluate the health effects of these screenings, it contributes to this literature by clarifying the behavioral foundations of preventive care utilization. By identifying how time and risk preferences relate to uptake, our findings highlight preference-driven mechanisms underlying engagement in preventive health behaviors.

2 Data and descriptive statistics

2.1 SHARE data

Our primary data source is SHARE (Börsch-Supan et al., 2013; SHARE-ERIC, 2024), a multidisciplinary longitudinal study that collects harmonized data on individuals aged 50 and older across European countries. We use data from wave 8, which uniquely includes detailed information on preventive health care use not available in earlier waves. Fieldwork was conducted in 27 countries between October 2019 and early March 2020, before being suspended due to COVID-19-related restrictions. This timing ensures that our measures of preventive care utilization are unaffected by pandemic-related disruptions.⁶

Our outcome variables measure utilization of four preventive services. Respondents were asked whether they had (i) received a flu vaccination in the past year, (ii) undergone an eye examination in the past two years, (iii) been screened for colon cancer in the past two years, and (iv) (for women) received a mammogram in the past two years. We first construct four binary indicators, coded one if the respondent reported using the respective service and zero otherwise. Based on these, we create a summary index of preventive care use combining the flu vaccination, eye exam, and colon cancer screening measures, excluding mammography since it only covers women.⁷ The index mitigates concerns about multiple hypothesis testing and improves statistical power when effects are expected to move in the same direction. Following Kling et al. (2007), we construct

⁵While evidence on the benefits of population-based vision screening is limited, effective treatments exist for conditions that can be detected through routine eye exams, such as vision correction or interventions that slow disease progression (Chou et al., 2022).

⁶Later in 2020, SHARE launched a shortened telephone-based "Corona Survey," followed by wave 9 in 2021–2022. As both were conducted under pandemic conditions likely to affect preventive care use, we exclude them from our analysis.

⁷Including mammography in a gender-specific version of the index yields similar results.

the index by standardizing each component to have mean zero and standard deviation one, averaging the standardized values, and re-standardizing the result.

SHARE also provides rich demographic background information, including respondents' own country of birth as well as that of their mother and father. We identify second-generation immigrants as individuals who were born in their current country of residence but have at least one parent born abroad. In addition, we extract standard socio-demographic controls: age, sex, educational attainment, marital status, and monthly net household income.

2.2 Country-level culture data

To measure culturally transmitted preferences, we use data from the GPS (Falk et al., 2018), which provides harmonized measures of time and risk preferences for nationally representative samples in 76 countries. These measures are based on survey items selected for their ability to predict incentivized behavior in laboratory experiments (see Falk et al., 2023). The patience score combines responses to a five-item staircase procedure involving hypothetical intertemporal trade-offs and a Likert-scale self-assessment of willingness to delay gratification. Risk-taking is measured analogously, combining responses to five binary lottery-versus-certain-payment choices and a self-reported general risk attitude. Higher patience scores indicate greater willingness to delay gratification, while higher risk-taking scores reflect greater risk tolerance. Both scores are standardized to have mean zero and standard deviation one in the full GPS data. Our main analysis uses country-level averages of these scores. As a robustness exercise, we also compute country-level averages using only GPS respondents aged 60 or older, which may better approximate the cohorts from which the parental generation in our SHARE sample originated.

We also include additional country-level cultural variables as controls in robustness checks. First, we use the GPS measure of trust, given its relevance to health care relationships (Arrow, 1963). Second, we incorporate two cultural indices from Hofstede (2001) and Hofstede et al. (2010) that may relate to preventive care: long-term orientation (linked to patience) and uncertainty avoidance (linked to risk attitudes). Lastly, we control for 1995 GDP per capita from the World Development Indicators to account for economic development, and age-standardized disease-specific prevalence, incidence and mortality rates from the Global Burden of Disease study 2019 (Global Burden of Disease

⁸Data on the indices come from https://geerthofstede.com/research-and-vsm/dimension-data-matrix/. While these indices may appear conceptually similar to the GPS measures, they are based on non-representative samples (primarily IBM employees) and include items only loosely related to preferences. For instance, long-term orientation includes agreement with the statement "I am proud to be a citizen of my country." By contrast, the GPS measures directly elicit preferences using experimentally validated questions in representative national samples (Falk et al., 2018).

Collaborative Network, 2022; Murray, 2024) to account for cross-country differences in exposure to health-related risks.

2.3 Sample construction and descriptive statistics

We define second-generation immigrants as individuals who are born in the country of interview but have at least one parent born abroad. We restrict the sample to second-generation immigrants in SHARE and assign to each individual the average patience and risk-taking scores of their parents' countries of birth. We further exclude individuals whose parents were born in countries not covered by the GPS, as well as those with missing data on flu shot, eye exam, or colon cancer screening. The final sample comprises 3,000 individuals residing in 27 countries, with parental origins from 45 different countries.

Table 1 presents summary statistics of key variables for this sample. Respondents are, on average, 68 years old. Reflecting this age profile, preventive care utilization is relatively common, though uptake is far from universal: 32 percent received a flu shot in the past year, 57 percent had an eye exam in the past two years, 30 percent were screened for colon cancer, and 50 percent of women underwent mammography in the same period. The average patience score is 0.16 (SD = 0.33), and the average risk-taking score is -0.12 (SD = 0.15). To facilitate interpretation, regression analyses use standardized versions of these scores, normalized to have mean zero and standard deviation one. Appendix Figure A.1 displays the distribution of average patience and risk-taking scores across countries of origin in our sample.

3 Empirical strategy

Our empirical strategy relies on comparing preventive care utilization among secondgeneration immigrants currently residing in the same country, allowing us to abstract from the confounding influence of institutional and economic factors at play in the country of residence. Our main specification relates an individual's preventive care utilization to their culturally transmitted patience and risk-taking. We include both preference measures in the same regression to account for the fact that time and risk preferences are conceptually and empirically intertwined (Andreoni and Sprenger, 2012; Hanushek et al., 2022). We estimate regressions of the form:

$$Y_{ioc} = \beta_1 Patience_o + \beta_2 Risk Taking_o + \mathbf{AGE}_i'\gamma + \mathbf{X}_{ioc}'\delta + \lambda_c + \varepsilon_{ioc}, \tag{1}$$

⁹If only one parent's country of origin is not covered by the GPS, we assign the preference scores of the other immigrant parent's country of origin. More generally, when control variables are missing, we impute sample means and include missing-value indicators to preserve sample size.

where Y_{ioc} denotes a preventive care outcome for individual i, residing in country c, whose parents come from origin countries o. The variables $Patience_o$ and $RiskTaking_o$ refer to the average patience and risk-taking scores in the parents' countries of birth. \mathbf{AGE}_i is a vector of single-year age dummies, \mathbf{X}_{ioc} is a vector of individual- and country-of-origin-level controls, including interview-month-by-year fixed effects, and λ_c is a vector of country-of-residence fixed effects. We estimate regressions by OLS and cluster standard errors at the country-of-origin level.¹⁰

With the inclusion of country-of-residence fixed effects, the regression in equation (1) identifies the influence of cultural heritage by comparing second-generation immigrants who reside in the same country – and thus face the same institutional and economic environment, including the same health care system – but whose parents come from countries that differ in their cultural norms regarding patience and risk-taking. Our baseline specification also includes a full set of age dummies, a dummy for female, and interview-month-by-year dummies. The key identifying assumption is that, conditional on these fixed effects and controls, remaining variation in preventive care utilization reflects differences in culturally transmitted preferences rather than omitted variables. Two main threats to this assumption remain: unobserved individual differences beyond culture, and potential correlations between our preference measures and other country-of-origin characteristics. We address both concerns by showing that our results are robust to including additional individual-level and country-of-origin controls.

4 Results

4.1 Main results

Table 2 presents the main results, beginning with the summary index of preventive care utilization and followed by the individual services. Panel A shows estimates from the baseline specification. For the index, a one SD increase in culturally transmitted patience is associated with a statistically significant 0.081 SD increase. Consistent with this pattern, patience is positively, though modestly, associated with three of the four underlying components of the index: a one SD increase in patience predicts a 2.2 pp higher likelihood of receiving a flu shot, a 2 pp higher likelihood of having an eye exam, and a 3.2 pp higher likelihood of undergoing colon cancer screening. For mammography, by contrast, the estimate is slightly negative but not statistically significant. Culturally

¹⁰We use the foreign-born parent's country of origin for clustering purposes. If both parents are foreign-born, we use the father's country of origin. Using the mother's country instead yields virtually identical results. Regarding modeling, we confirm that for binary outcome variables, results from logit estimations are qualitatively similar to those from our main linear probability models.

transmitted risk-taking shows the opposite pattern. A one SD increase in risk-taking is associated with a 0.069 SD decline in the summary index, and the coefficients on the individual services are all negative, although small in magnitude. Taken together, these findings suggest that cultural heritage helps explain some of the individual variation in preventive health care uptake.

Panel B adds controls for college education, marital status, and household income to the specifications from panel A. These variables address concerns about residual confounding from socioeconomic factors known to be associated with preventive health care utilization. Including these controls leaves the main coefficients largely unchanged. However, previous research suggests that at least some of these variables are themselves shaped by culturally transmitted preferences (e.g., Hanushek et al., 2022), rendering them "bad controls." We therefore revert to the baseline specification in subsequent analyses.

A natural question is whether the associations differ between women and men, given well-documented gender differences in health behaviors and interactions with the health care system. Appendix Table A.1 reports estimates separately by gender. The general pattern – that patience is positively related to preventive care use and risk-taking is negatively related – appears in both subsamples. However, the associations tend to be stronger for women. For example, patience is associated with a 0.114 SD increase in the summary index among women, whereas the corresponding estimate for men is 0.043 SD and statistically insignificant. Risk-taking also shows more consistently negative associations for women. That said, the gender-specific sample sizes are relatively small, and several coefficients have wide confidence intervals, preventing us from drawing firm conclusions about gender differences in effect sizes.

Our findings are consistent with previous evidence showing that cultural heritage shapes economic behavior (e.g. Bietenbeck et al., 2024; Fernández and Fogli, 2009; Hanushek et al., 2022) and with standard models of health investment (e.g. Grossman, 1972; Picone et al., 1998), which highlight how health care decisions reflect trade-offs between immediate costs and uncertain future benefits. Our findings also align with evidence that time and risk preferences are transmitted across generations (for example, Dohmen et al., 2012 show strong parent—child correlations in both general and health-related risk attitudes). By showing that these culturally transmitted preferences translate into measurable differences in preventive care use, our study provides new evidence on the behavioral channels through which cultural background affects health decisions.

4.2 Robustness checks

We conduct several robustness checks to assess the sensitivity of our findings to alternative specifications, sample restrictions, and potential sources of omitted-variable bias.

Table 3 presents the first set of results. Panel A includes continent-of-origin fixed effects, restricting identifying variation to within-continent differences. This helps ensure that the estimated relationships are not driven by broad regional differences in cultural traits among countries sharing similar historical or geographic contexts. Panel B excludes country-of-residence-by-country-of-origin cells with fewer than ten observations to address concerns that small immigrant groups may disproportionately influence the results. Panel C restricts the sample to respondents with two foreign-born parents, thereby strengthening the identification of cultural transmission by focusing on individuals more likely to have been exposed to the cultural preferences prevalent in their parents' country of origin and reducing potential cultural dilution (Bisin and Verdier, 2025). Across all three variations, the estimates remain stable and similar in magnitude to the baseline results. However, standard errors tend to increase, rendering some estimates statistically insignificant at conventional levels.

Panel D addresses the temporal alignment of the preference measures. Although cultural traits tend to be highly persistent (e.g., Fernández and Fogli, 2009; Giuliano, 2007; Voigtländer and Voth, 2012), the GPS data were collected in 2012, whereas the parents of our respondents typically emigrated decades earlier. To mitigate concerns that contemporary GPS measures may not reflect the preferences of earlier cohorts, we recompute origin-country patience and risk-taking scores using only GPS respondents aged 60 years or older. The resulting estimates are very similar to the baseline and, if anything, slightly larger in magnitude.

We next examine whether our main results are confounded by other country-of-origin characteristics correlated with patience and risk-taking. Figure 1 augments the baseline specification with additional origin-country variables, including GDP per capita and cultural indices. The point estimates for both patience and risk-taking remain stable when these covariates are added, although confidence intervals widen somewhat, likely due to multicollinearity (both preferences are known to correlate with GDP per capita (Falk et al., 2018)). As a further test, we incorporate age-standardized disease-specific prevalence, incidence, and mortality rates from the Global Burden of Disease Study (Global Burden of Disease Collaborative Network, 2022) into the baseline specification. These variables capture potential health-environment confounders in the parental countries of origin. The results, reported in Appendix Table A.2, remain very similar to the baseline estimates, suggesting that our findings are not driven by unobserved disease burdens in the countries of origin.

5 Conclusion

Many European countries recommend preventive services such as flu vaccinations and cancer screenings for older adults and offer them free of charge. Still, uptake remains far from complete. Understanding why some people forgo these services is essential for improving population health and designing effective policy.

This paper provides new evidence that culturally transmitted time and risk preferences help explain variation in preventive care utilization. We find that respondents originating from more patient cultures are more likely to use preventive services, whereas those from more risk-tolerant cultures are less likely to do so. These patterns are highly consistent across outcomes and robust to a wide range of specification checks. They also align with standard models of health investment (e.g., Grossman, 1972; Picone et al., 1998), which emphasize that health care decisions require weighing short-term inconveniences against uncertain future benefits.

The estimated effects are modest; for example, a one standard deviation increase in culturally transmitted patience is associated with roughly a 2–3 percentage point higher likelihood of using specific preventive services. However, this magnitude should be interpreted in light of the population studied. Our sample consists of older second-generation immigrants, a group likely to have experienced cultural assimilation over the life course. Moreover, intergenerational transmission of cultural traits is typically only partial (Berggren et al., 2020; Chowdhury et al., 2022). The estimates therefore likely represent a lower bound of the underlying cultural influence.

Although culture is not the primary driver of preventive health care use, our results point to small but systematic effects. Because time and risk preferences are transmitted across generations, cultural background may be one channel through which health behaviors persist within families and communities. Recognizing these influences can help inform the design of more effective, behaviorally informed prevention strategies that account for differences in underlying cultural predispositions toward risk, patience, and health investment.

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Tables and Figures

Table 1: Summary statistics

	Mean	SD	
Socio-demographic characteristics			
Age	67.79	9.55	
Female	0.58	0.49	
College degree	0.30	0.46	
Married	0.66	0.47	
Household net income (EUR/month)	3430.05	9041.45	
Cultural heritage			
Patience (raw)	0.16	0.33	
Patience (std.)	0.00	1.00	
Risk-taking (raw)	-0.12	0.15	
Risk-taking (std.)	0.00	1.00	
Preventive care utilization			
Flu shot past year	0.32	0.47	
Eye exam past 2 years	0.57	0.50	
Colon cancer screening past 2 years	0.30	0.46	
Mammogram past 2 years (women only)	0.50	0.50	
Summary index	0.00	1.00	
Sample information			
No. of individuals	3,000		
No. of countries of origin	45		

Notes: The table shows means and standard deviations of key variables used in the empirical analysis.

Table 2: Main results

	Summary	Flu shot	Eye exam	Colon c.	Mammo-			
	index (1)	(2)	(3)	screening (4)				
Panel A: baseline specification								
Patience (std.)	0.081***	0.022^{*}	0.020^{*}	0.032**	-0.011			
	(0.028)	(0.012)	(0.012)	(0.015)	(0.016)			
Risk-taking (std.)	-0.069***	-0.032***	-0.021**	-0.011	-0.026			
	(0.020)	(0.010)	(0.009)	(0.012)	(0.017)			
Panel B: controlling for socio-demographic characteristics								
Patience (std.)	0.073**	0.021^{*}	0.016	0.029^{*}	-0.015			
,	(0.027)	(0.012)	(0.011)	(0.015)	(0.015)			
Risk-taking (std.)	-0.066***	-0.031***	-0.020**	-0.010	-0.024			
	(0.020)	(0.010)	(0.009)	(0.012)	(0.016)			
Observations (both panels)	3,000	3,000	3,000	3,000	1,728			

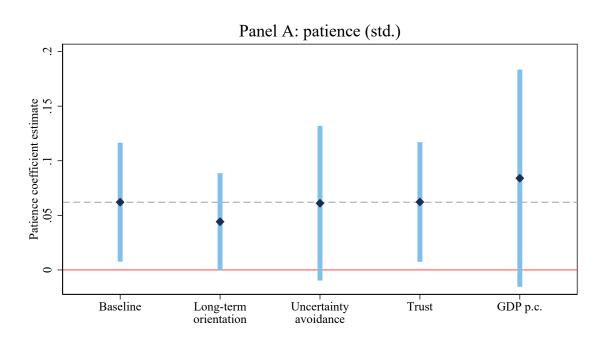
Notes: The table reports estimates from regressions of preventive care utilization on culturally transmitted patience and risk-taking. All specifications include country fixed effects, age fixed effects, interview-month-by-year fixed effects, and a female dummy. Panel B additionally controls for college education, marital status, and household income. Standard errors (in parentheses) are clustered by country of origin (42 clusters). * p < 0.10, ** p < 0.05, *** p < 0.01.

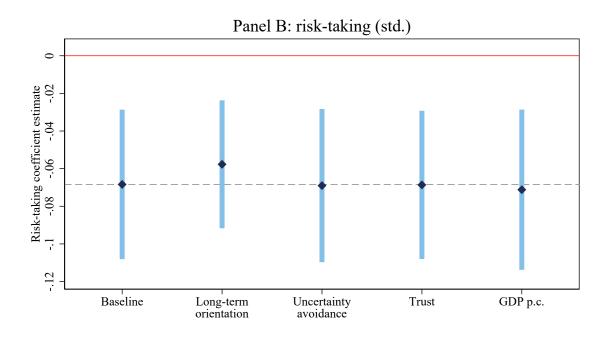
Table 3: Additional robustness checks

	Summary	Flu shot	Eye exam	Colon c.	Mammo-		
	index			screening	gram		
	(1)	(2)	(3)	(4)	(5)		
Panel A: controlling for continent-of-origin fixed effects							
Patience (std.)	0.065^{*}	0.013	0.022	0.024	-0.035**		
	(0.033)	(0.016)	(0.013)	(0.016)	(0.015)		
Risk-taking (std.)	-0.056*	-0.025^*	-0.023^*	-0.004	0.008		
	(0.030)	(0.014)	(0.013)	(0.015)	(0.016)		
Observations	3,000	3,000	3,000	3,000	1,728		
Panel B: dropping small residence	× origin cell	s					
Patience (std.)	0.107***	0.037**	0.031**	0.030	0.009		
	(0.029)	(0.017)	(0.014)	(0.019)	(0.017)		
Risk-taking (std.)	-0.068**	-0.028*	-0.030***	-0.005	-0.046**		
- ,	(0.030)	(0.015)	(0.009)	(0.017)	(0.017)		
Observations	2,444	2,444	2,444	2,444	1,424		
Panel C: only individuals with two foreign-born parents							
Patience (std.)	0.053	0.021	0.025	0.003	0.003		
,	(0.046)	(0.017)	(0.017)	(0.025)	(0.023)		
Risk-taking (std.)	-0.065**	-0.046***	-0.015	0.001	-0.024		
	(0.032)	(0.013)	(0.012)	(0.020)	(0.019)		
Observations	1,204	1,204	1,204	1,204	700		
Panel D: patience and risk-taking of population aged ≥ 60 in country of origin							
Patience (pop. aged ≥ 60 , std.)	0.074**	0.016	0.022	0.031^*	-0.015		
(1 1 0 _ ,)	(0.036)	(0.018)	(0.016)	(0.017)	(0.017)		
Risk-taking (pop. aged ≥ 60 , std.)	-0.095^{**}	-0.042***	-0.025^{**}	-0.020	-0.053***		
	(0.037)	(0.015)	(0.012)	(0.020)	(0.018)		
Observations	3,000	3,000	3,000	3,000	1,728		

Notes: The table reports estimates from regressions of preventive care utilization on culturally transmitted patience and risk-taking. All specifications build on the baseline model from Panel A of Table 2, and include country fixed effects, age fixed effects, interview-month-by-year fixed effects, and a female dummy. Panel A additionally includes continent-of-origin fixed effects. Panel B excludes country-of-residence-by-country-of-origin cells with fewer than 10 observations. Panel C restricts the sample to individuals with two foreign-born parents. Panel D uses the average patience and risk-taking scores among the population aged 60 and above in the country of origin. Standard errors (in parentheses) are clustered by country of origin. * p < 0.10, ** p < 0.05, *** p < 0.01.

Figure 1: Controlling for other country-of-origin variables





Notes: The figure displays point estimates and 95 percent confidence intervals from regressions of the summary index of preventive care utilization on culturally transmitted patience (Panel A) and risk-taking (Panel B). In each panel, the leftmost coefficient and dashed line reproduce the main estimate from column 5 of Panel A in Table 2. The remaining coefficients are from regressions that include the country-of-origin variable indicated on the horizontal axis as an additional control.

- APPENDIX FOR ONLINE PUBLICATION -

Appendix A Additional Figures and Tables

Panel A: patience

(.3981047,1.071452]
(-0.203397,3981047)
(-3.2600402,.020397)
(-3.2600402,.020397)
(-0.0034394,115058)
(-1.0034394,1150588)
(-1.1584018,.032498)
(-1.1584018,.032498)

Figure A.1: Patience and risk-taking across countries

Notes: The figure displays average patience (Panel A) and risk-taking (Panel B) scores for all origin countries observed in the estimation sample.

Table A.1: Heterogeneity by gender

	Summary index (1)	Flu shot (2)	Eye exam (3)	Colon c. screening (4)	Mammo- gram (5)
	(1)	(2)	(3)	(4)	(0)
Panel A: women					
Patience (std.)	0.114^{**}	0.036^{**}	0.042^{*}	0.027	-0.011
	(0.046)	(0.016)	(0.022)	(0.017)	(0.016)
Risk-taking (std.)	-0.071^*	-0.019	-0.037**	-0.011	-0.026
	(0.036)	(0.013)	(0.015)	(0.015)	(0.017)
Observations	1,738	1,738	1,738	1,738	1,728
Panel B: men					
Patience (std.)	0.043	0.004	-0.004	0.038	
	(0.052)	(0.017)	(0.019)	(0.025)	
Risk-taking (std.)	-0.061	-0.046***	0.004	-0.012	
- , ,	(0.039)	(0.017)	(0.015)	(0.022)	
Observations	1,262	1,262	1,262	1,262	

Notes: The table reports estimates from regressions of preventive care utilization on culturally transmitted patience and risk-taking, separately for women (Panel A) and men (Panel B). Specifications correspond to the baseline model from Panel A of Table 2, and include country fixed effects, age fixed effects, interview-month-by-year fixed effects, and a female dummy. Standard errors (in parentheses) are clustered by country of origin. * p<0.10, *** p<0.05, *** p<0.01.

Table A.2: Accounting for disease burden in the origin country

	Summary index	Flu shot	Eye exam	Colon c. screening	Mammo- gram	
	(1)	(2)	(3)	(4)	(5)	
Panel A: controlling for disease-specific prevalence in country of origin						
Patience (std.)	0.098***	0.034^{**}	0.016	0.038**	-0.000	
	(0.035)	(0.014)	(0.012)	(0.015)	(0.023)	
Risk-taking (std.)	-0.080***	-0.034***	-0.022**	-0.013	-0.028*	
	(0.024)	(0.010)	(0.009)	(0.012)	(0.017)	
Observations	3,000	3,000	3,000	3,000	1,728	
Panel B: controlling	ng for diseas	e-specific in	cidence in c	country of or	rigin	
Patience (std.)	0.107^{***}	0.034**		0.034**	-0.010	
	(0.034)	(0.014)		(0.014)	(0.022)	
Risk-taking (std.)	-0.075***	-0.034***		-0.012	-0.027	
	(0.022)	(0.010)		(0.012)	(0.017)	
Observations	3,000	3,000		3,000	1,728	
Panel C: controlling for disease-specific deaths in country of origin						
Patience (std.)	0.085***	0.029**		0.032**	-0.019	
	(0.029)	(0.012)		(0.015)	(0.015)	
Risk-taking (std.)	-0.063**	-0.036***		-0.009	-0.010	
	(0.025)	(0.011)		(0.013)	(0.017)	
Observations	3,000	3,000		3,000	1,728	

Notes: The table reports estimates from regressions of preventive care utilization on culturally transmitted patience and risk-taking. All specifications build on the baseline model from Panel A of Table 2, and include country fixed effects, age fixed effects, interview-month-by-year fixed effects, and a female dummy. Panels A, B and C additionally include controls for the prevalence (Panel A), incidence (Panel B) and death rate (Panel C) of/from upper and lower respiratory infections (columns 1 and 2), blindness and vision loss (columns 1 and 3, only prevalence), colon and rectum cancer (columns 1 and 4), and breast cancer (column 5). All measures of prevalence, incidence and death are age standardized, refer to calendar year 2019 and are taken from the 2021 Global Burden of Disease study (GBD; Global Burden of Disease Collaborative Network, 2022; Murray, 2024). Standard errors (in parentheses) are clustered by country of origin. * p < 0.10, ** p < 0.05, *** p < 0.01.