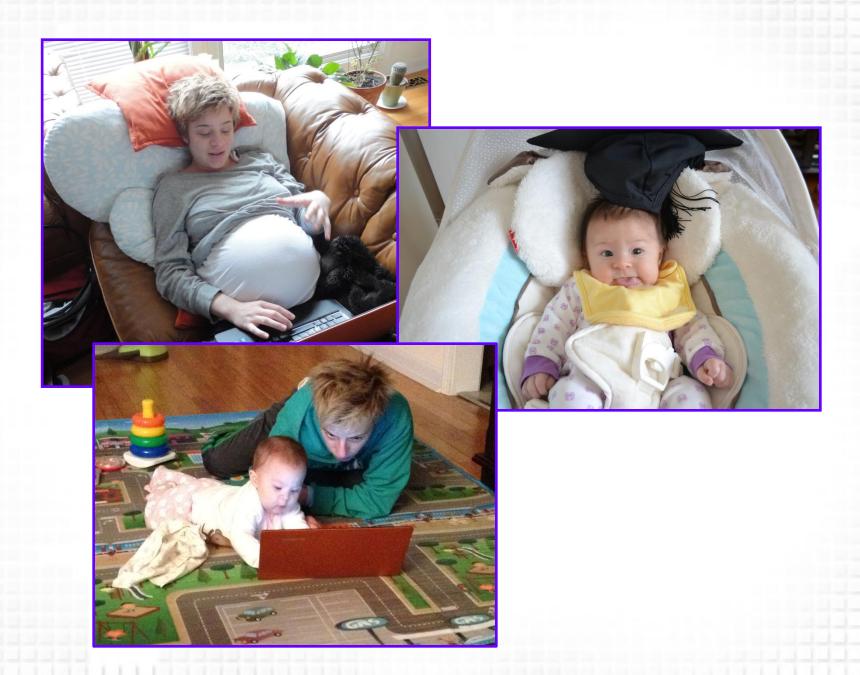


# Cultural and Interviewer Effects on Interview Privacy

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# Outline

- Background
- Research Questions
- Methods
- Results
- Limitations
- Conclusion/Recommendation

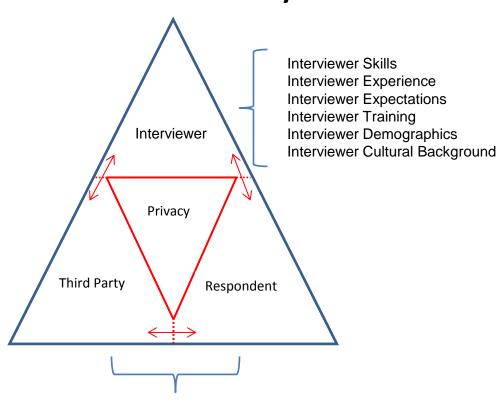


# Background: Why interview privacy?

- Possible effect on reporting especially sensitive information
- Variation in interview privacy cause differences in measurement properties of collected information
- Rates of non-private interviews
  - USA: 21% 59% (Anderson & Silver, 1987; Moskowitz, 2004; Pollner & Adams, 1994; Pollner & Adams, 1997; Silver, Abramson, & Anderson, 1986; Smith, 1997)
  - Europe: 37% 52% (Bulck, 1999; Reuband, 1992; Welkenhuysen-Gybels & Billiet, 2001; Zipp & Toth, 2002)
  - Developing countries in Asia, Latin America, the Caribbean, and Africa:
     17%-82% (Casterline & Chidambaram, 1984)
- The most common type of third person present was a spouse/partner followed by children



# Background: Tri-party Influences on Interview Privacy



Demographic Characteristics Socioeconomic Characteristics Third-Party Relationship to Respondent Housing Characteristics Cultural Background

Figure: Tri-party Influences on Interview Privacy



# Background: Cultural Dimensions

- Cultural dimensions impact the different aspects of people's lives (Hofstede, Hofstede, and Minkov, 2010)
- Among the dimensions that could be relevant to establishing interview privacy:
  - Individualism
  - Power distance
  - Masculinity



# Background: Individualism Dimension

Individualism: "pertains to societies in which the ties between individuals are loose; everyone is expected to look after his or her immediate family. Collectivism as its opposite, pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which through people's lifetime continue to protect them in exchange for unquestioning loyalty" (Hofstede et al., 2010, pp. 107–108)



# Background: Power Distance Dimension

Power Distance: "The extent to which less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally. Institutions are the basic elements of society such as the family, the school, and the community" (Hofstede et al., 2010, p. 77)



# Background: Masculinity Dimension

Masculinity: "A society is called masculine when emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be more modest, tender, and concerned with the quality of life. A society is called feminine when emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life" (Hofstede et al., 2010, pp. 155–156).



### **Research Questions**

- Gap: No empirical research on
  - Cultural variation
  - Interviewer variation

#### Research Questions:

- Are there significant cultural variations in interview privacy?
- What cultural dimensions explain variations across countries in interview privacy?
- Does the effect of respondent characteristics and third-party characteristics on interview privacy vary by culture?
- Is there a significant variation between interviewers in the level of interview privacy they achieve?
- Does interviewer variability in achieved privacy rates differ across countries?



### Methods

 Data from 14 countries: Belgium, Brazil, Bulgaria, Germany, India, Italy, Japan, Lebanon, Mexico, Nigeria, the People's Republic of China, Romania, Spain, and the United States of America.

#### Measures:

- Outcome :
  - Any third party presence during the interview
  - Partner presence during the interview
- Predictors
  - Respondent-level: age, gender, marital status, education level, employment status, household income, household size, partner's education level and partner's type of occupation (for partner presence)
  - Interviewer-level: no measures were available only interviewer ID
  - Country-level: level of individualism, power distance, masculinity, Gross National Income per capita (low, middle, high)



### Methods (cont'd)

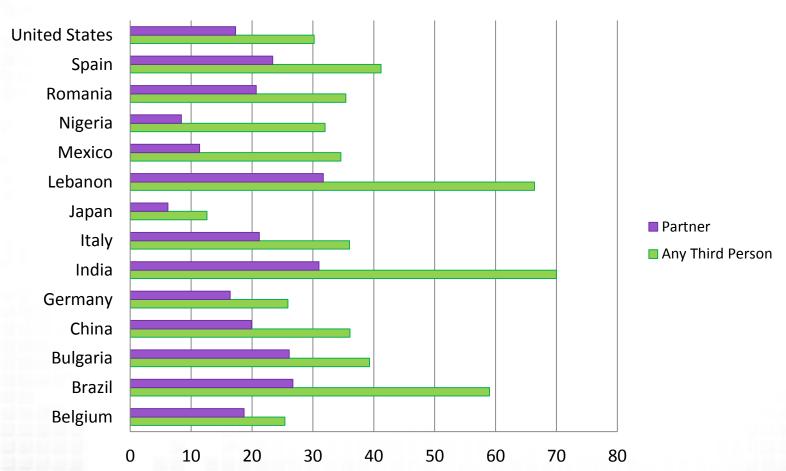
### Analysis

- Multi-level model: respondent (level 1), interviewer (level 2), country (level 3)
- Interviewer and country modeled as random effects
- All predictors modeled as fixed effects
- Interactions between respondent-level predictors and country-level predictors were tested



# Results: Rates of Third Party Presence

#### Percent of Interviews Conducted in The Presence of a third Person





## Results: Any third Party Presence

### Results For Any Third Party Presence:

- Respondent-level factors:
  - Reduced the odds of third party presence: being female, young, divorced/widowed, or being a homemaker
  - Increased the odds of third party presence: being currently married, unemployed, having low education, low income, or having multiple household members
- Country-level factors
  - GNI per capita: living in a country with middle GNI per capita (vs. high), and low GNI per capita (not significant) increased the odds of third party presence
  - Individualism: interacted with age, gender, marital status, education level, household size
    - Effect of these socio-demographics got larger as country's level of individualism increased



## Results: Any Third Party Presence (cont'd)

### Results For Any third Party Presence:

- Interviewer-effects: large between-interviewer variance
  - Larger than between-country variance
  - Did not vary greatly from one country to another



### Results: Partner Presence

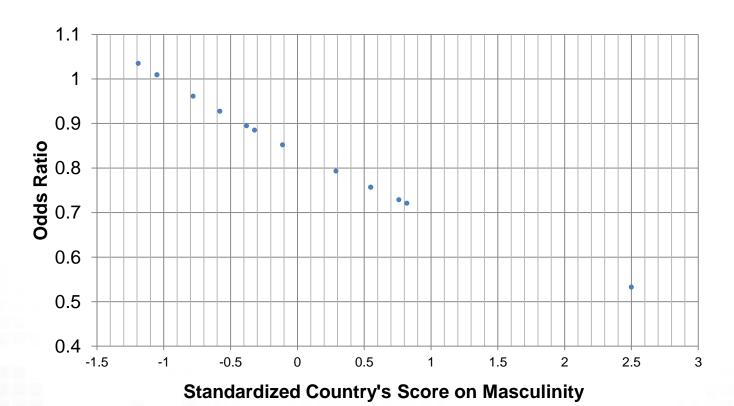
#### Results For Partner Presence:

- Respondent-level factors
  - Generally similar to any third party presence
  - In addition: having an unemployed partner increased the odds of partner presence
- Country-level factors
  - Individualism: similar interaction effects with age, education and household size
  - Masculinity: interacted with being a homemaker and partner occupation
    - Effect of being a homemaker (vs. employed) and having a spouse with low-skill occupation (vs. unemployed) got larger as the level of masculinity increased



### Results: Partner Presence (cont'd)

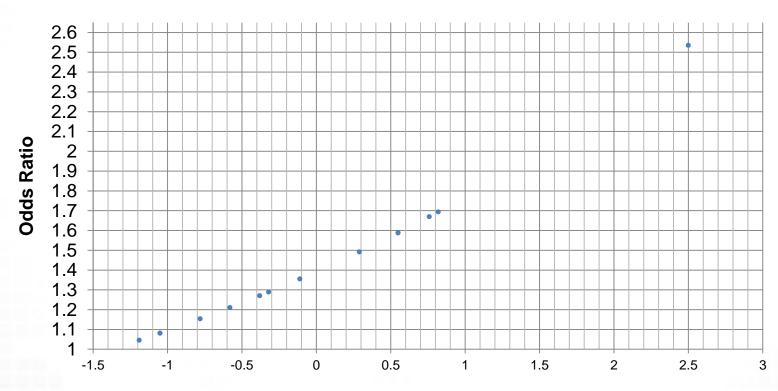
### Predicted Effect of Being a Homemaker vs. Having a Job on Partner Presence during the Interview





### Results: Partner Presence (cont'd)

Predicted Effect of Having a Partner with Low-Skill Occupation vs. High-Skill Occupation on Partner Presence



**Standardized Country's Score on Masculinity** 



## Summary of Results

#### Results:

- RQ1: Are there significant cultural variations in interview privacy?
  - Yes
- RQ2: What cultural dimensions explain variations across countries in interview privacy?
  - Any third party presence: Individualism and GNI per capita
  - Partner presence: Masculinity and Individualism
- RQ3: Is there a significant variation between interviewers in the level of interview privacy they achieve?
  - Yes
- RQ4: Does interviewer variability in achieved privacy rates differ across countries?
  - No



### Limitations

- Cultural dimension indices that are used in this analysis come from data collected several years ago.
- An interpenetrated design was not implemented thus isolating the possible geographic clustering component from the estimated interviewer variance was not possible.
- Interviewers might misreport the presence of a third person contributing to some of the observed variation.
- Interviewer-level characteristics were not available, which hindered explaining possible sources of between-interviewer variation.



### Conclusion:

- Collect more data and investigate ...
  - The dynamics of the interaction
  - Interviewer characteristics including their attitudes and behaviors towards privacy
  - Social distance between the interviewer and respondent
  - Power dynamics between respondent and third person
  - Respondent's cultural background
- Design better interviewer trainings...
  - On how to request, negotiate, achieve, and maintain privacy
  - That are culturally sensitive



# **THANK YOU!**



# **Additional Slides**

Odds Ratio from Multilevel Logistic	<b>Model Predicting Presence of Any</b>	Third Party during the	
Interview (Total N= 27573) a			
	N 4l - l 4	N 4I - I O	

Interview (Total N= 27573) <sup>a</sup>				
Model 1 Model 2				
Sex				
Females	0.87 (0.82–0.92)	0.87 (0.82-0.92)		
Males	1.00	1.00		
Age in years				
18–34	0.70 (0.62–0.79)	0.70 (0.62-0.79)		
35–49	0.70 (0.62–0.78)	0.69 (0.62-0.78)		
50–64	0.69 (0.63–0.77)	0.69 (0.63-0.77)		
65 and over	1.00	1.00		
Marital Status				
Married/Cohabiting	1.17 (1.06–1.28)	1.17 (1.06–1.28)		
Divorced/Widowed/Separated	0.73 (0.64–0.82)	0.73 (0.64-0.82)		
Single	1.00	1.00		
Education Level				
Very low	2.27 (2.05–2.52)	2.27 (2.05–2.52)		
Low	1.78 (1.62–1.94)	1.78 (1.63–1.94)		
Mid	1.39 (1.28–1.51)	1.39 (1.28–1.51)		
High	1.00	1.00		
Employment Status				
Homemaker	0.89 (0.80–0.98)	0.89 (0.80-0.98)		
Student	1.05 (0.88–1.25)	1.05 (0.88–1.25)		
Unemployed/Retired/Other	1.11 (1.03–1.21)	1.11 (1.03-1.20)		
Employed	1.00	1.00		
Income Level				
Very Low	1.14 (1.03–1.26)	1.14 (1.03–1.26)		
Low	1.07 (0.98–1.17)	1.07 (0.98–1.17)		
Mid	1.01 (0.92–1.10)	1.01 (0.93-1.10)		
High	1.00	1.00		
Household Size				
HH size two	2.80 (2.49–3.14)	2.80 (2.49–3.15)		
HH size three	3.10 (2.74–3.50)	3.10 (2.74–3.50)		
HH size more than three	3.27 (2.89–3.71)	3.27 (2.89–3.71)		
HH size one	1.00	1.00		
Any 12 month Disorder				
Have a disorder vs. no disorder	1.18 (1.10–1.26)	1.18 (1.10–1.26)		
Standardized Individualism Score (IND)	0.63 (0.41–0.96)	1.20 (0.61–2.35)		
Level of GNI per capita				
Low		4.13 (0.76–22.49)		
Middle		4.96 (1.44–17.06)		
High		1.00		

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Female*IND	0.95 (0.90–1.00)	0.95 (0.90–1.00)
Age 18–34* IND	0.95 (0.86-1.04)	0.95 (0.86-1.04)
Age 35–49* IND	0.94 (0.85-1.02)	0.93 (0.85-1.02)
Age 50-64* IND	0.91 (0.84-1.00)	0.91 (0.84-1.00)
Married*IND	1.09 (1.01–1.17)	1.09 (1.01-1.17)
Divorced/Widowed*IND	1.12 (1.01-1.24)	1.12 (1.01-1.24)
Very low education*IND	1.10 (1.01-1.20)	1.10 (1.01-1.20)
Low education* IND	1.06 (0.98-1.14)	1.06 (0.98-1.14)
Mid education * IND	1.05 (0.98-1.13)	1.05 (0.98-1.13)
HH size two* IND	1.33 (1.20-1.47)	1.33 (1.20-1.47)
HH size three* IND	1.34 (1.20-1.48)	1.34 (1.20-1.48)
HH size more than three*	1.35 (1.22-1.50)	1.35 (1.21-1.50)
IND		
<b>Between-Country Variance</b>	0.41 (0.18)	0.25 (0.12)
(s.e.)		
Between-Interviewer	0.59 (0.04)	0.59 (0.04)
Variance (s.e.)		

Note. a Significant variables with p < 0.05 are presented in bold. Dashes "---" indicate variables not included in the model. Models exclude India since no interviewer identification was available. s.e.= standard error; IND= individualism.

	Model 1	Model 2 <sup>b</sup>	Model 3
Sex			
Females	0.62 (0.57–0.67)	0.61 (0.56-0.66)	0.61 (0.56-0.66)
Males	1.00	1.00	1.00
Age in years			
18–34	0.73 (0.63–0.85)	0.72 (0.61-0.85)	0.72 (0.61-0.85)
35–49	0.69 (0.60–0.79)	0.67 (0.57-0.78)	0.67 (0.57-0.78)
50–64	0.74 (0.65–0.84)	0.72 (0.63-0.82)	0.71 (0.62-0.82)
65 and over	1.00	1.00	1.00
Education Level			
Very low	1.52 (1.32–1.76)	1.59 (1.36-1.86)	1.59 (1.36-1.86)
Low	1.33 (1.18–1.51)	1.35 (1.18-1.54)	1.35 (1.18-1.54)
Mid	1.22 (1.09–1.36)	1.20 (1.06-1.36)	1.20 (1.06-1.36)
High	1.00	1.00	1.00
Employment Status			
Homemaker	0.84 (0.74–0.95)	0.82 (0.72-0.95)	0.82 (0.72-0.95)
Student	0.64 (0.37–1.12)	0.57 (0.32-1.03)	0.57 (0.32-1.03)
Unemployed/Retired/Other	0.97 (0.87–1.08)	0.96 (0.86-1.08)	0.97 (0.86-1.08)
Employed	1.00	1.00	1.00
Income Level			
Very Low	0.92 (0.80–1.04)	0.93 (0.80-1.08)	0.93 (0.81–1.08)
Low	0.99 (0.88–1.11)	1.01 (0.89-1.15)	1.01 (0.89-1.15)
Mid	0.97 (0.87–1.10)	0.98 (0.87-1.10)	0.98 (0.87-1.10)
High	1.00	1.00	1.00
Household Size			
HH size two	3.20 (2.31–4.45)	3.39 (2.41-4.77)	3.39 (2.41–4.77)
HH size three	3.11 (2.23–4.34)	3.34 (2.36-4.73)	3.34 (2.36-4.73)
HH size more than three	2.72 (1.95–3.80)	2.93 (2.07-4.16)	2.93 (2.06-4.15)
HH one	1.00	1.00	1.00
Spouse Education Level			
Married*Very low	1.11 (0.95–1.29)	1.10 (0.94–1.30)	1.10 (0.94–1.30)
Married*Low	1.11 (0.97–1.27)	1.08 (0.94-1.24)	1.08 (0.94–1.24)
Married*Mid	1.07 (0.94–1.21)	1.06 (0.93-1.21)	1.06 (0.93-1.21)
Spouse Occupation Status			
Married*Spouse does not work	2.00 (1.72–2.33)	2.01 (1.71–2.36)	2.01 (1.71–2.36)
Married*Low skill	1.40 (1.16–1.68)	1.20 (1.00-1.46)	1.20 (1.00-1.45)
Married*Low-average skill	1.19 (1.02–1.38)	1.15 (0.98–1.35)	1.15 (0.98–1.35)
Married*Average-high skill	1.15 (0.93–1.43)	1.06 (0.85-1.33)	1.06 (0.85-1.33)
High skill	1.00	1.00	1.00

Odds Ratio from Multilevel Logistic Model Predicting Partner Presence during the Interview (Total N=26,316) a

	Model 1	Model 2 <sup>b</sup>	Model 3
Any 12 month Disorder			
Have a disorder vs. no disorder	1.11 (1.02-1.21)	1.13 (1.02-1.24)	1.12 (1.02-1.24)
Individualism Index (IND)	1.03 (0.55-1.90)	0.97 (0.50-1.87)	1.17 (0.55-2.52)
Masculinity Index (MAS)	0.68 (0.46-0.99)	0.70 (0.49-0.99)	0.76 (0.54-1.06)
Power Distance Index (PD)	1.32 (0.76-2.29)	1.17 (0.64-2.12)	0.90 (0.48-1.71)
Level of GNI per capita			
Low			2.25 (0.40-12.61)
Middle			3.06 (0.75-12.52)
High			1.00
Age 18–34* IND	0.99 (0.88–1.11)	0.99 (0.88–1.12)	0.99 (0.88–1.12)
Age 35–49* IND	0.90 (0.81-1.01)	0.92 (0.82-1.03)	0.92 (0.82-1.03)
Age 50–64* IND	0.88 (0.79-0.98)	0.88 (0.79-0.99)	0.88 (0.79-0.99)
Very low education*IND	1.17 (1.05-1.31)	1.21 (1.08–1.35)	1.21 (1.08–1.35)
Low education* IND	1.06 (0.97-1.16)	1.10 (1.00-1.21)	1.10 (1.00-1.21)
Mid education * IND	1.07 (0.98-1.17)	1.09 (0.99–1.19)	1.09 (0.99-1.19)
HH size two* IND	1.44 (1.07-1.93)	1.42 (1.05-1.91)	1.42 (1.05-1.92)
HH size three* IND	1.37 (1.02-1.85)	1.39 (1.02-1.88)	1.39 (1.02-1.88)
HH size more than three* IND	1.42 (1.06-1.92)	1.45 (1.07-1.97)	1.46 (1.07-1.98)
Very low income*PD	0.85 (0.75-0.97)		
Low income*PD	0.92 (0.83-1.03)		
Middle income*PD	0.93 (0.84-1.03)		
Homemaker*MAS	0.83 (0.71-0.78)		
Student*MAS	0.77 (0.34-1.75)		
Unemployed/Retired/Other*MAS	0.94 (0.84-1.06)		
Spouse does not work *MAS	1.07 (0.89-1.28)		
Low-skill spouse occupation*MAS.	1.28 (1.02-1.60)		
Low-average skill spouse	1.06 (0.88-1.27)		
occupation*MAS			
Average-high kill spouse	1.02 (0.76-1.37)		
occupation*MAS			
Between-Country Variance (s.e.)	0.22 (0.11)	0.23 (0.12)	0.19 (0.11)
Between-Interviewer Variance		0.44 (0.04)	0.44 (0.04)
(s.e.)			

Note. a Significant variables with p<0.05 are presented in bold. Dashes "---" indicate variables not included in the model. b Excludes India since no interviewer information was available. Sample size drops 24,987. Interactions between PDI and MAS and respondent-level characteristics were dropped since once India was excluded they became not significant. Model 1 was replicated without India and these interactions were not significant.

s.e.= standard error; IND= individualism; PD=power distance; MAS=masculinity.



# Effect of Third Party Presence on Reporting Survey Data

### Effect of Third Party Presence on Reporting Survey Data

#### Main Predictors

- Any third party present (all interview time, some of the time, none)
- Partner present (all interview time, some of the time, none)
- Respondent's need for social conformity from the CIDI social conformity scale (High score vs. low score )
- Cultural dimensions
- Interactions

#### Control variables:

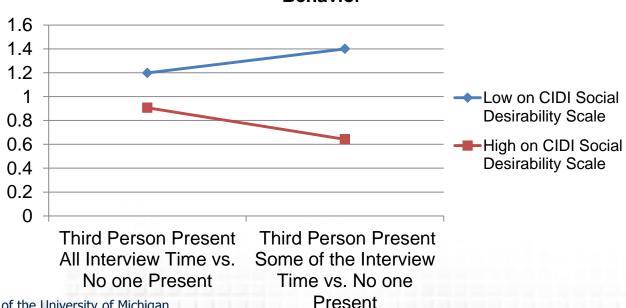
- Respondent socio-demographics
- Partner's education level (for marital rating outcome)
- Partner's type of occupation (for marital rating outcome)



### Effect of Interview Privacy on Reporting Suicide Behavior

- Main Effect Model:
  - Third party presence increased the odds of reporting suicidal behavior
  - Scoring high on social conformity scale reduced the odds of reporting suicide behavior
- Interaction Model :Social conformity moderated the effect of third party

### Effect of Third-Party Presence on Reporting Suicidal Behavior





### Effect of Interview Privacy on Marital Rating Score

Odds Ratio and 95% Confidence Interval from Multi-level Logistic Model Predicting High Marital Rating Score (N=6,595)<sup>a</sup>

	Main Model	Interaction Model
Presence of Partner		
Partner Present All of the Time	1.59 (1.08–2.35)	0.51 (0.24-1.10)
Partner Present Some of the Time	1.36 (1.07-1.73)	1.51 (0.92–2.50)
No Partner Present	1.00	1.00
Social Conformity Score		
High Score <sup>b</sup>	1.55 (1.17–2.05)	1.53 (1.16-2.02)
Low Score	1.00	1.00
GNI per capita		
Low	1.65 (1.19–2.30)	1.58 (1.01-2.28)
Middle	0.72 (0.52-0.99)	0.68 (0.47-0.98)
High	1.00	1.00
Partner Present All of the Time* Low GNI per capita		2.44 (0.78–7.68)
Partner Present Some of the Time* Low GNI per capita		1.02 (0.46–2.25)
Partner Present All of the Time* Middle GNI per capita		4.43 (1.79–10.92)
Partner Present Some of the Time* Middle GNI per capita		0.84 (0.47–1.50)

*Note*. <sup>a</sup> Significant ORs with p<0.05 are presented in bold. Dashes (---) indicate variables not entered in the model. All models control for sex, age, marital status, education level, income level, employment status, and household size.

<sup>&</sup>lt;sup>b</sup> High score is greater or equal to one standard deviation above the mean.



### Odds Ratio and 95% Confidence Interval from Multilevel Logistic Model Predicting Chronic Conditions<sup>a</sup>

Conditions			
	High Blood Pressure	Asthma	Arthritis
	N=20,482	N=20,516	N=20,446
	OR(CI)	OR(CI)	OR(CI)
Presence of Third Party			
Third Party Present All of the	1.10 (0.97–1.25)	0.78 (0.61–1.01)	0.95 (0.82–1.09)
Time			
Third Party Present Some of the	1.07 (0.99–1.20)	1.02 (0.88-1.19)	1.07 (0.97–1.18)
Time			
No Third Party Present	1.00	1.00	1.00
Social Conformity Score			
High Score <sup>b</sup>	0.93 (0.84-1.03)	1.03 (0.87–1.22)	0.90 (0.81–1.00)
Low Score	1.00	1.00	1.00
Individualism Standardized Score	2.08 (1.78–2.43)	1.74 (1.40–2.17)	1.28 (1.05–1.55)
Country's GNI per capita			
Low	4.06 (2.41-6.84)	1.07 (0.49–2.33)	1.08 (0.56-2.05)
Middle	6.35 (3.88–10.39)	1.03 (0.51–2.10)	0.47(0.25-0.86)
High	1.00	1.00	1.00

*Note.* <sup>a</sup> Significant Odds ratios with p<0.05 are presented in bold. Gray indicates variables not entered in the model. All models control for sex, age, marital status, education level, income level, employment status, household size, and the country's score on masculinity.

<sup>&</sup>lt;sup>b</sup> High score is greater or equal to one standard deviation above the mean.