Patterns in disability and frailty in older adults: Evidence from SAGE

Introduction

- Globally the proportion of older population is increasing
- Older population is faced with chronic conditions that are often associated with disabilities and being frail
- There is a need to have scientific and reliable measures of disability and frailty and the risk factors to aid health surveillance and policy development
- SAGE, built on the work of WHS, aims to acquire information to address issues of Ageing and adult Health through a longitudinal study in six countries

Indicators that will be presented

- Frailty Index
- ADL – Activities of Daily Living
- WHODAS- WHO Disability Assessment Schedule

for subjects aged 50 years and over.

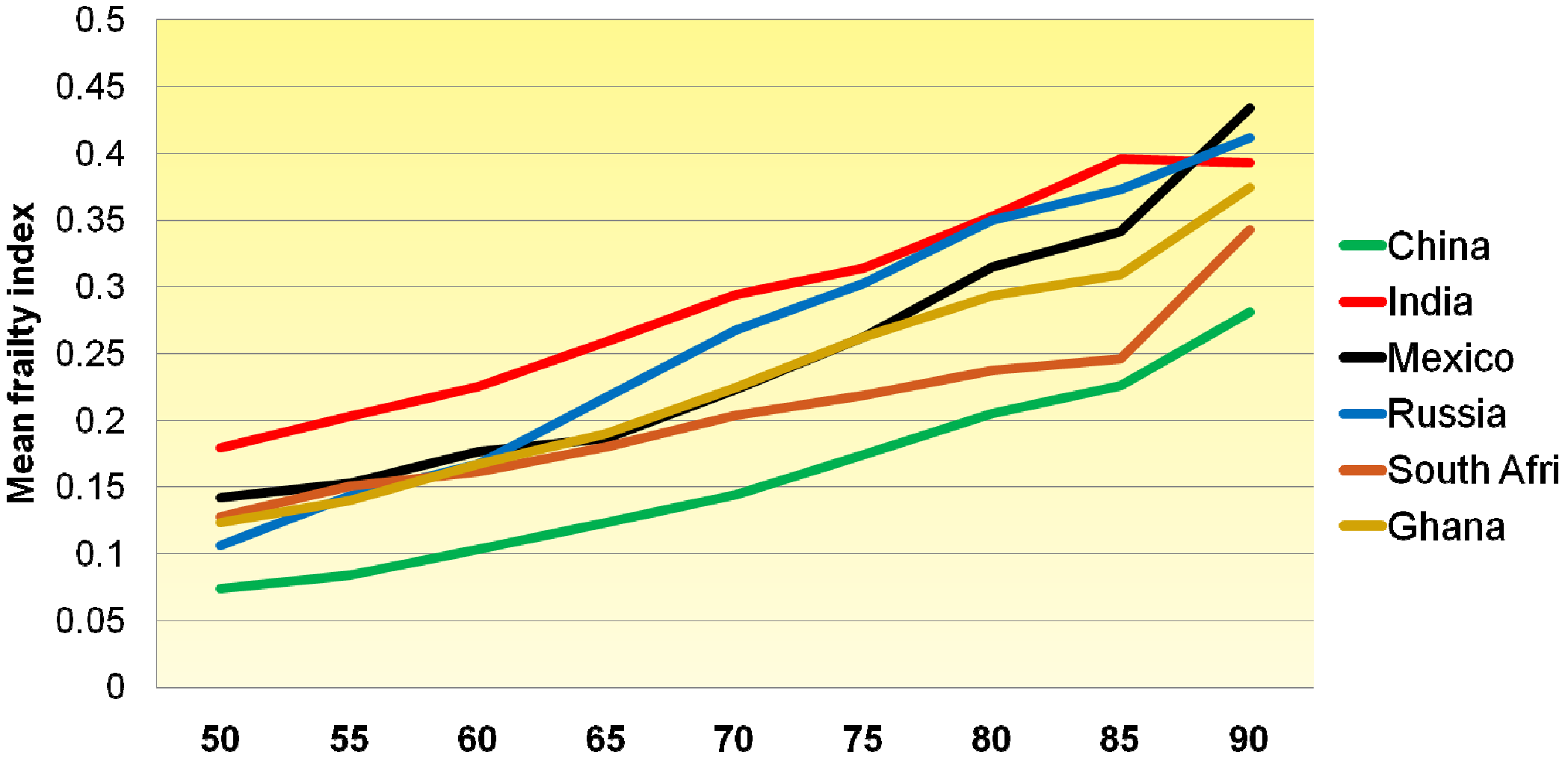
Frailty Index – 36 items

- Self-reported health (0=very good; 0.25=good, 0.5=Moderate, 0.75=Bad, 1=very bad)
- Self-reported conditions: Arthritis, Stroke, Angina, Diabetes, Copd, Asthma, Depression, Hypertension, Cataract (0=No, 1=Yes)
- Functional assessment: Sitting, Walk 100m, Stand up, Stand long time, Climb, Stop, Pick up, House responsibilities, Community activities, Extending arms, Concentration, Walk long time, Washing, Dressing, Work every day, Carrying, Moving, Eating, Getting up, Toilet, Transport, Getting out, Emotion (0=No difficulties; 0.25=Mild, 0.5=Moderate, 0.75=Severe, 1=Extreme/cannot)

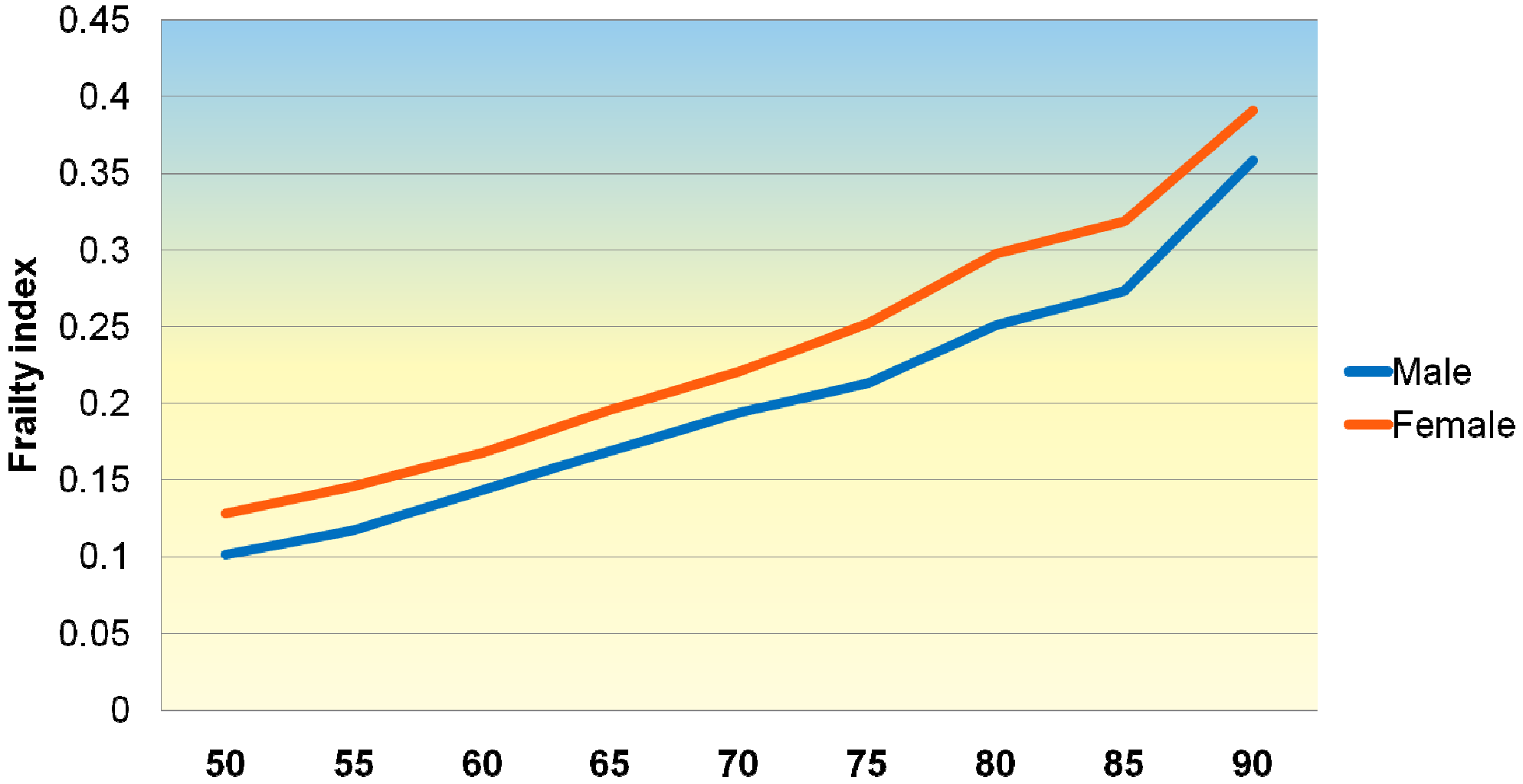
Frialty Index – 36 items

- BMI (0=bmi>= 18.5; 1=bmi<18.5)
- Grip strength (algorithm with sex, bmi and grip strength measure) (0=No weakness, 1=weakness)
- Rapid walk (0=less than 2 seconds, 1=more than 2 seconds)

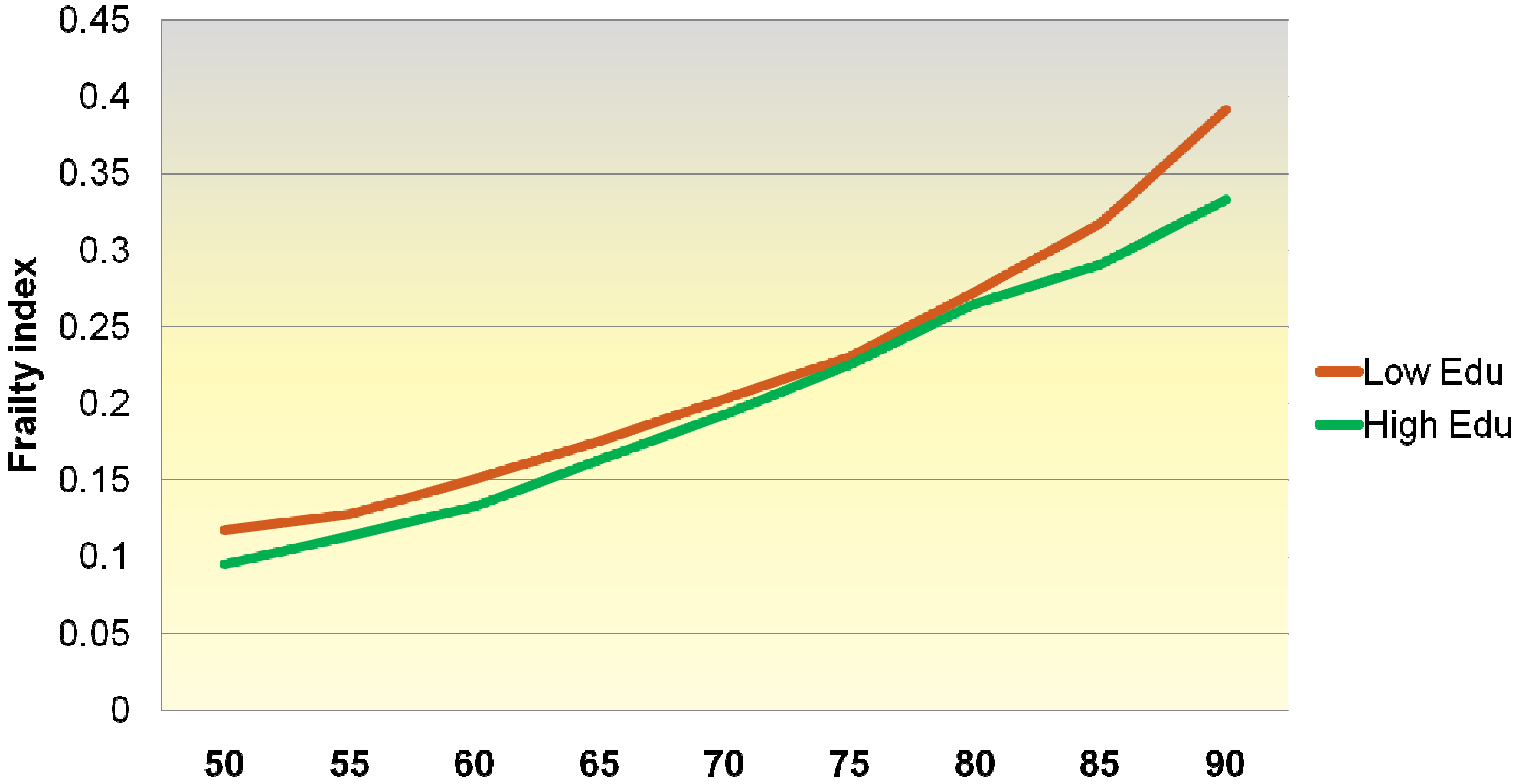
Frailty by country



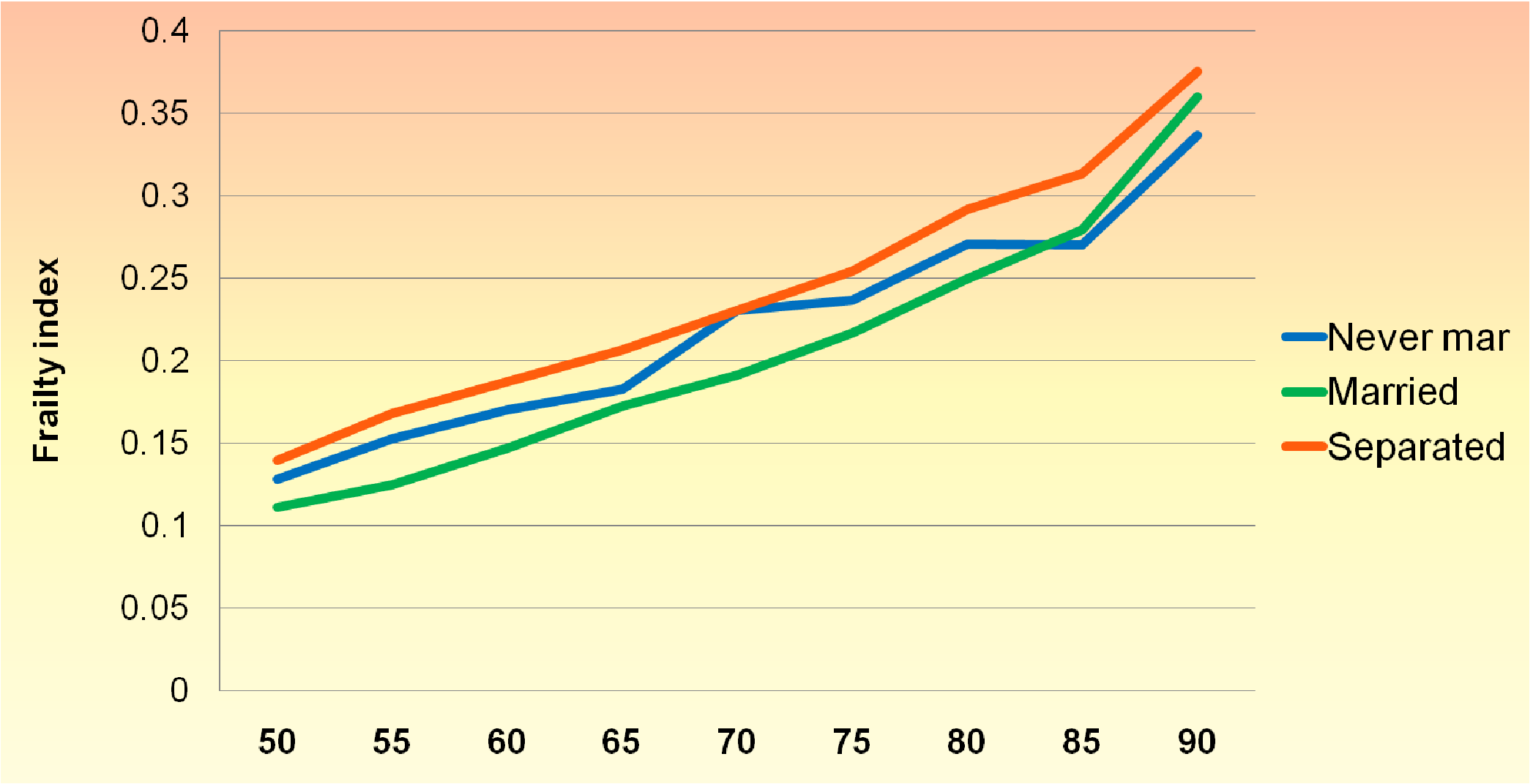
Frailty by sex



Frailty by educational status



Frailty by marital status



Frailty Index – classification

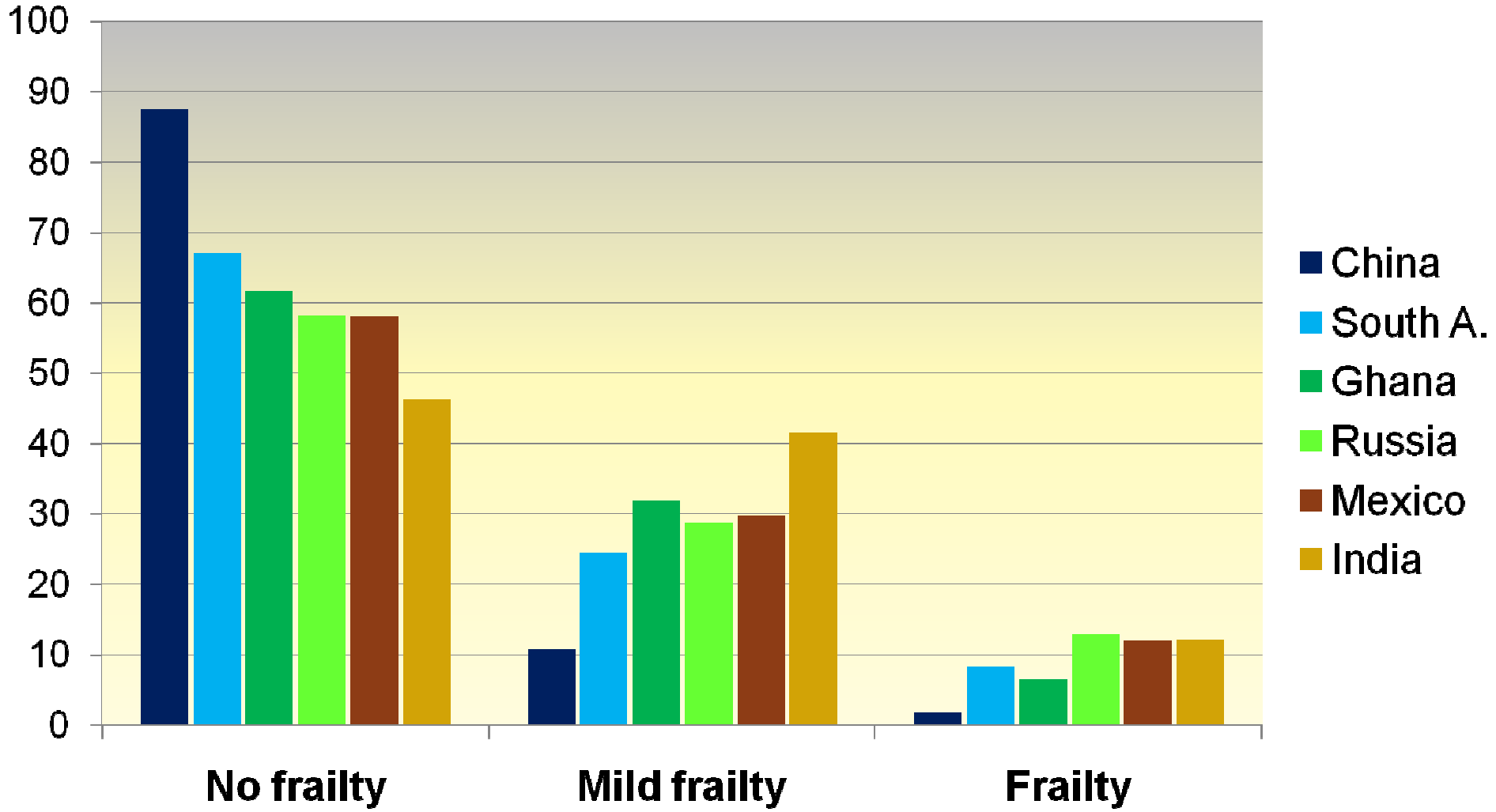
- **Index= sum of "deficits" over the total score (based on the number of available items)**
- **Classification**

[0-0.2]=No frailty

(0.2-0.4)=Mild frailty

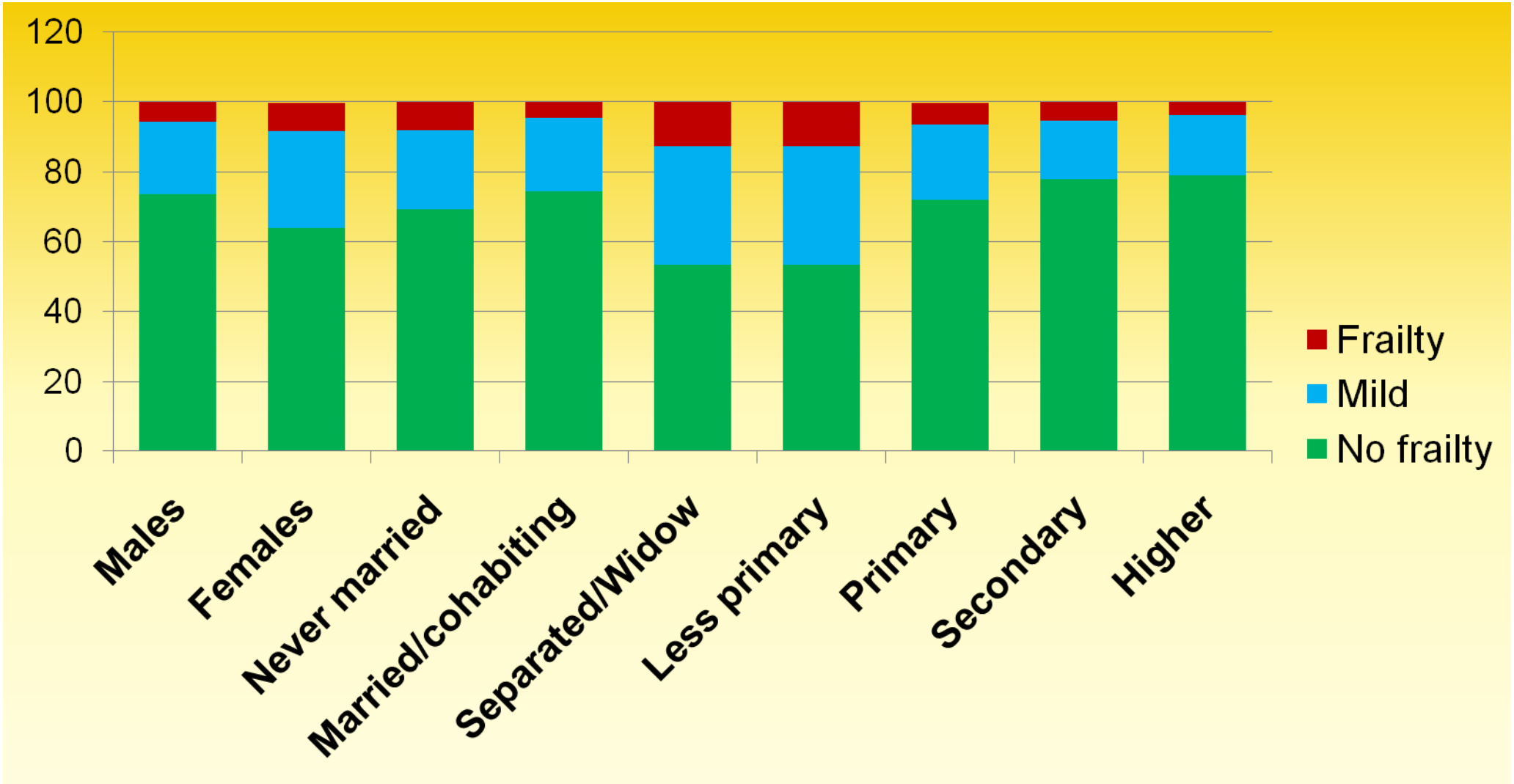
[0.4-1.0)=Frailty

Frailty Index Distribution
by country



Frailty Index Distribution

by sex, marital status and education

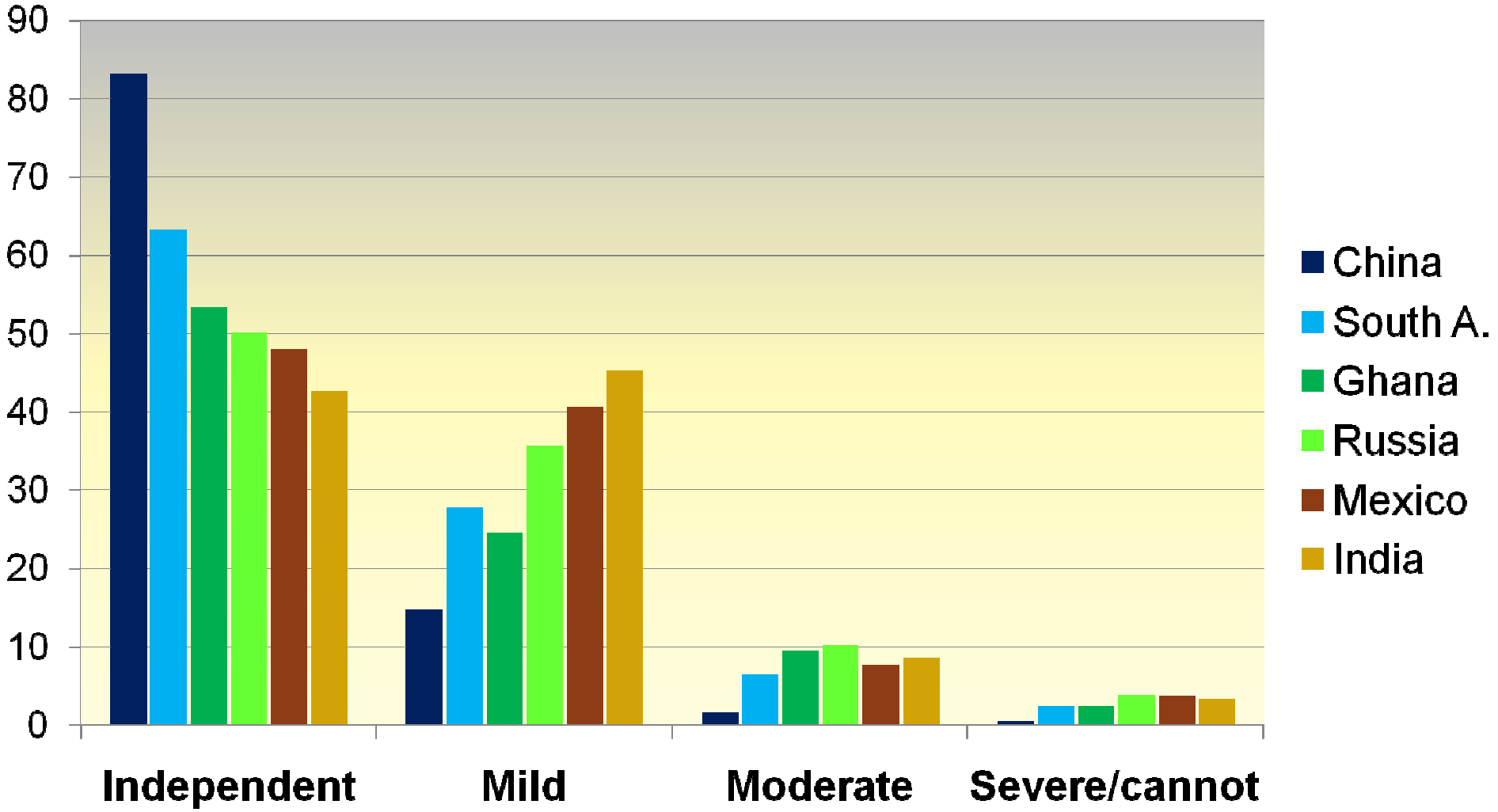


ADL – 6 items

- Functional assessment: Washing, Dressing, Moving, Eating, Getting up, Toilet (0=No difficulties; 1=Mild, 2=Moderate, 3=Severe, 4=Extreme/cannot)
- ADL score= sum of "deficits" over the total score (of the available items)
- Classification

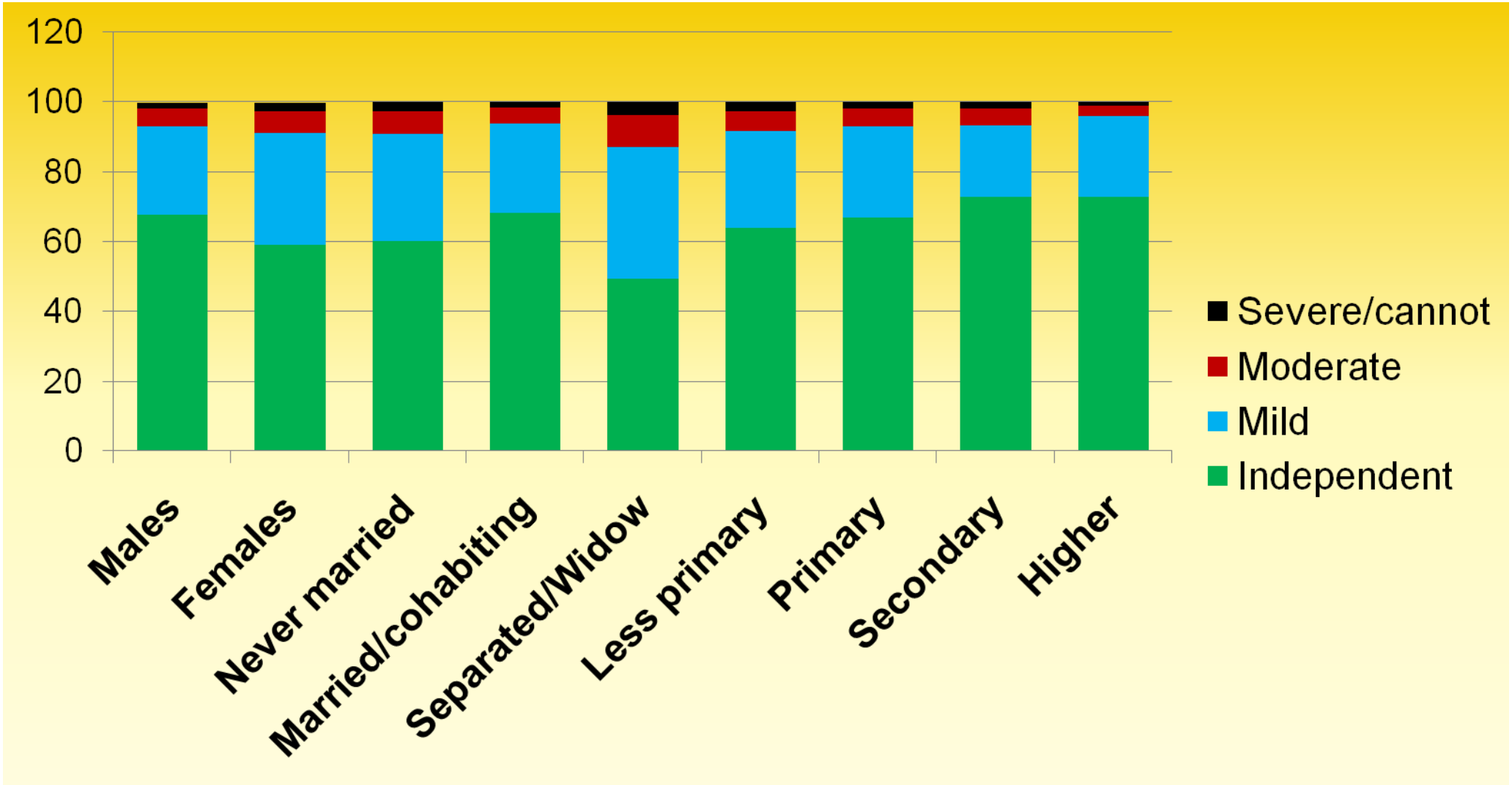
0=Independent
(0-0.2]=Mild
[0.2-0.4)=Moderate
[0.4-1.0]=Severe/cannot

ADL Distribution
by country



ADL Distribution

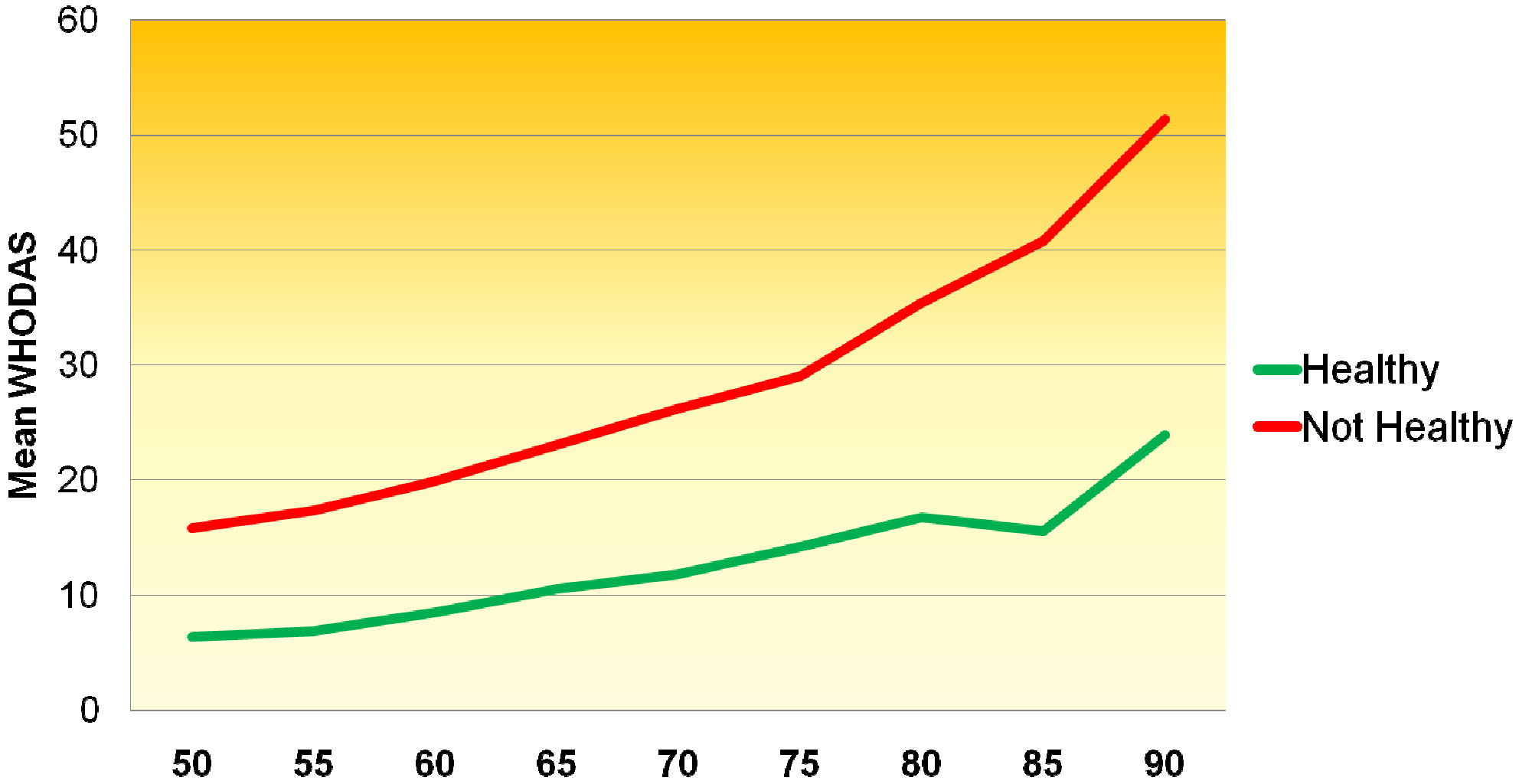
by sex, marital status and education



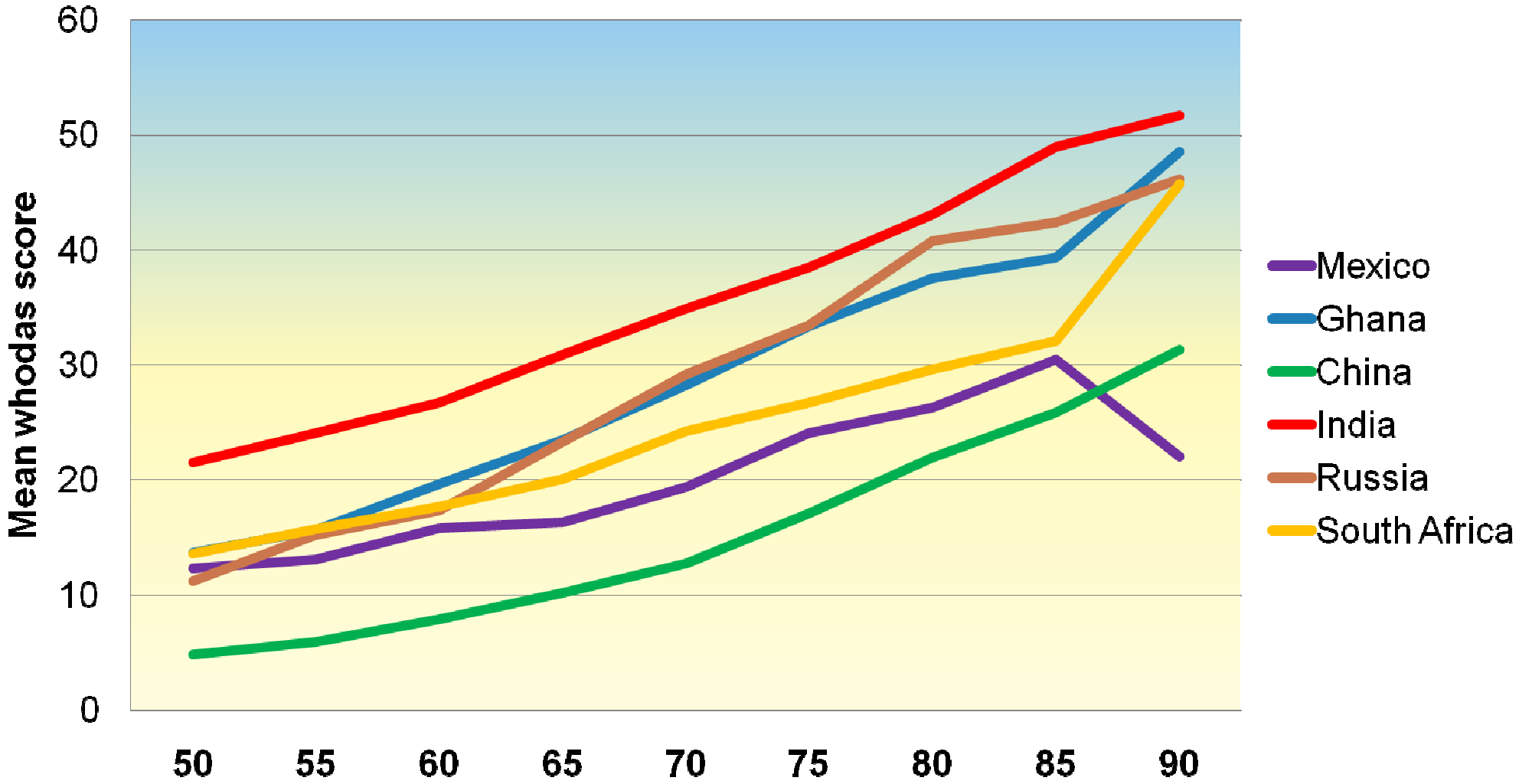
WHODAS - Items

- Interpersonal Activities (New friends, dealing with strangers
- Cognition (Learning new tasks)
- Functioning assessment (Standing long, house responsibilities, community activities, concentration, walk long, washing, dressing, day to day work, emotion)

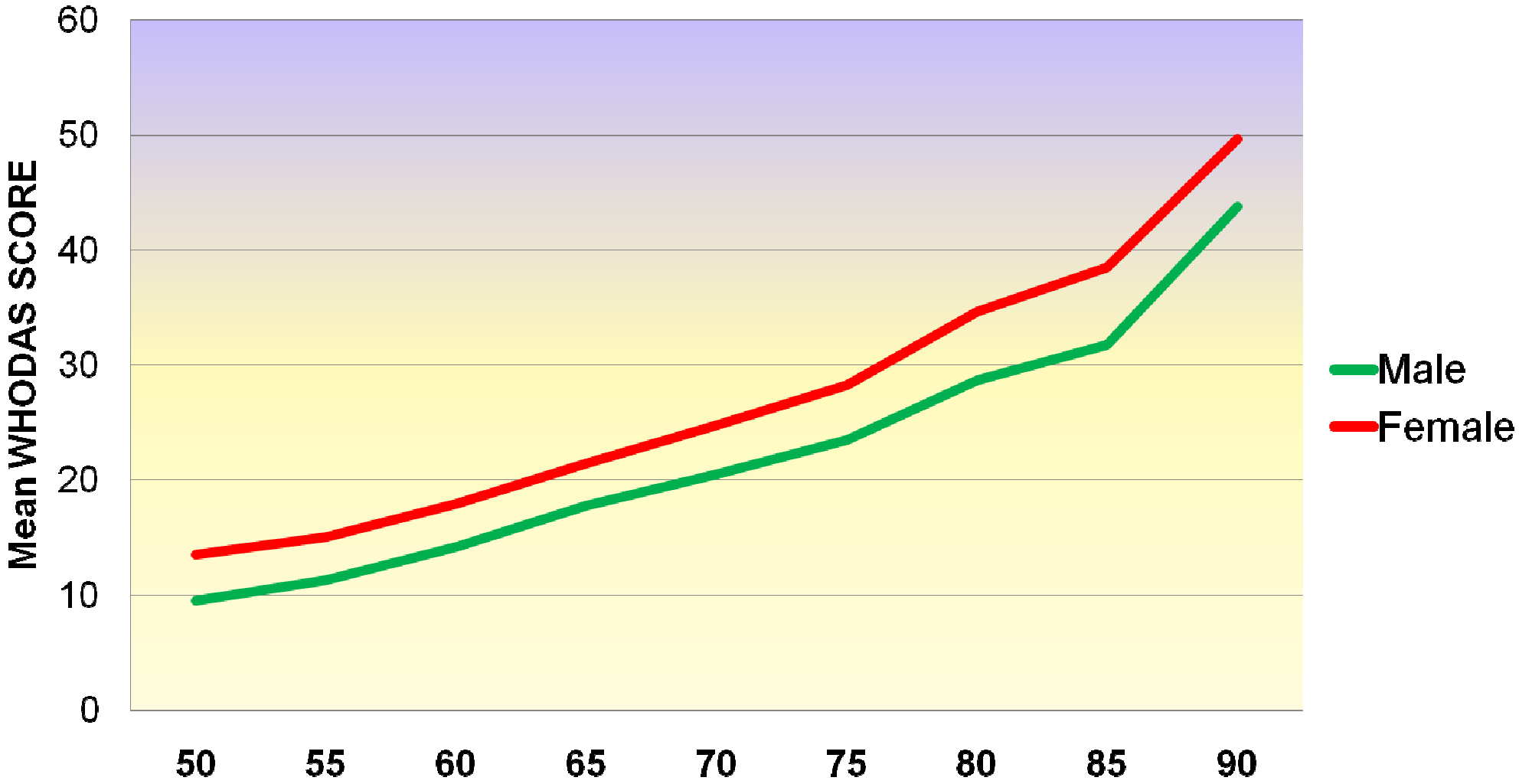
WHODAD by self reported health status



WHODAS by country

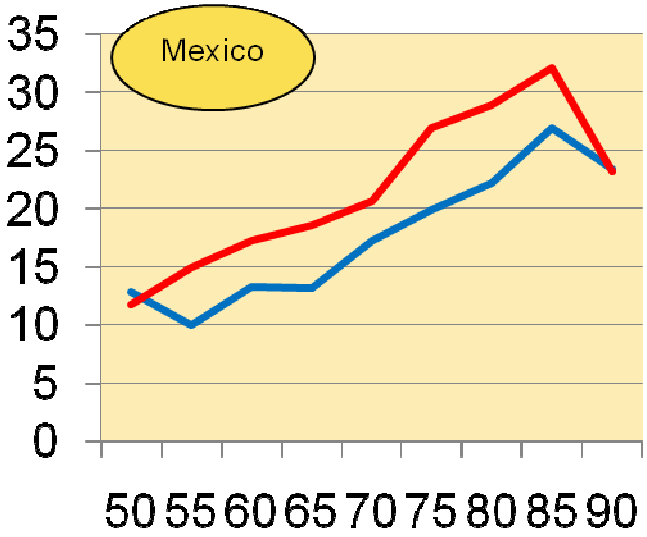


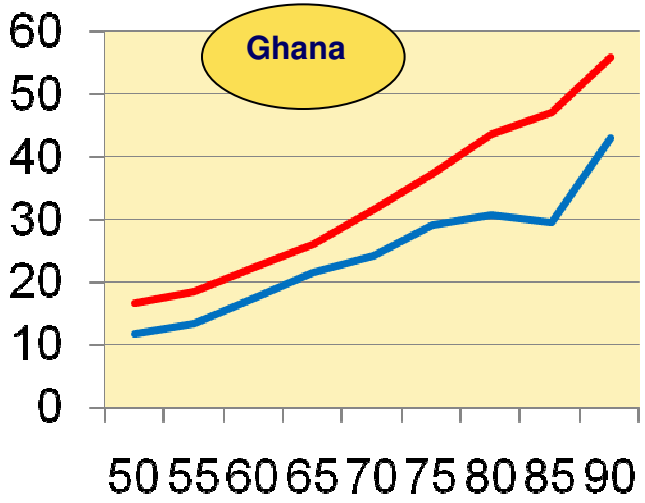
WHODAS by sex

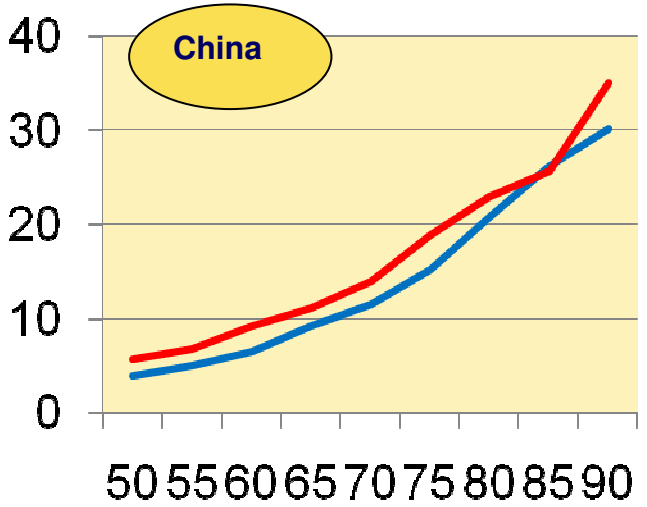


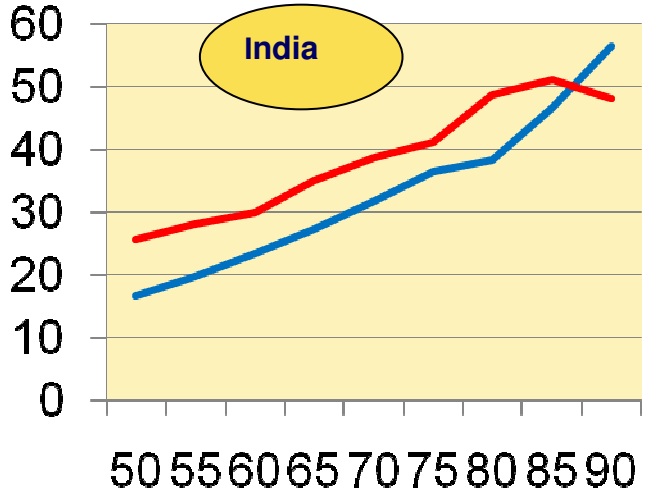
WHODAS by sex and country

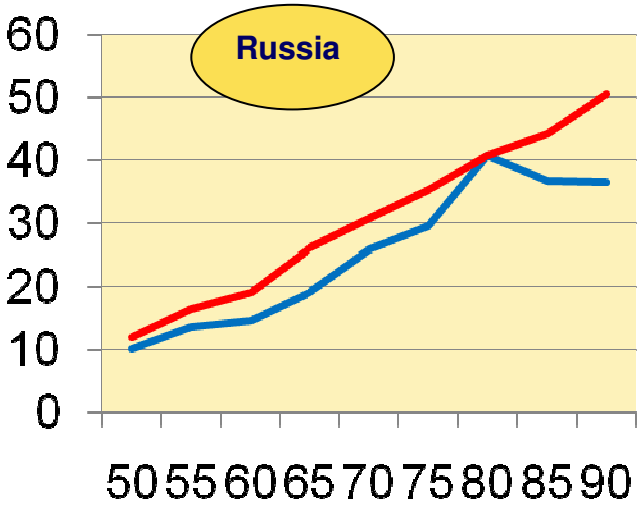
(female=red)

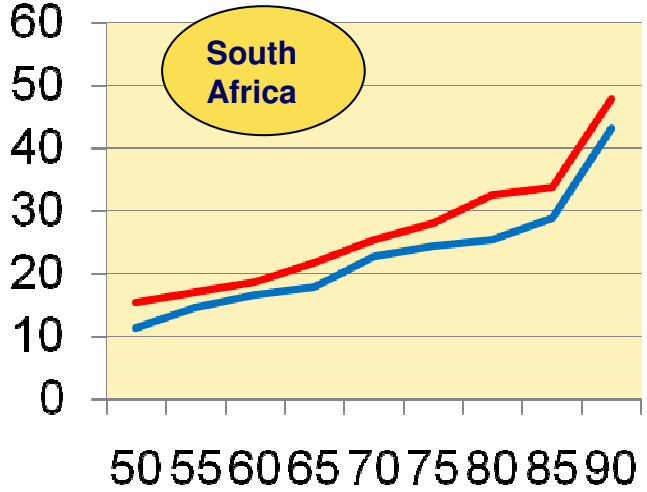




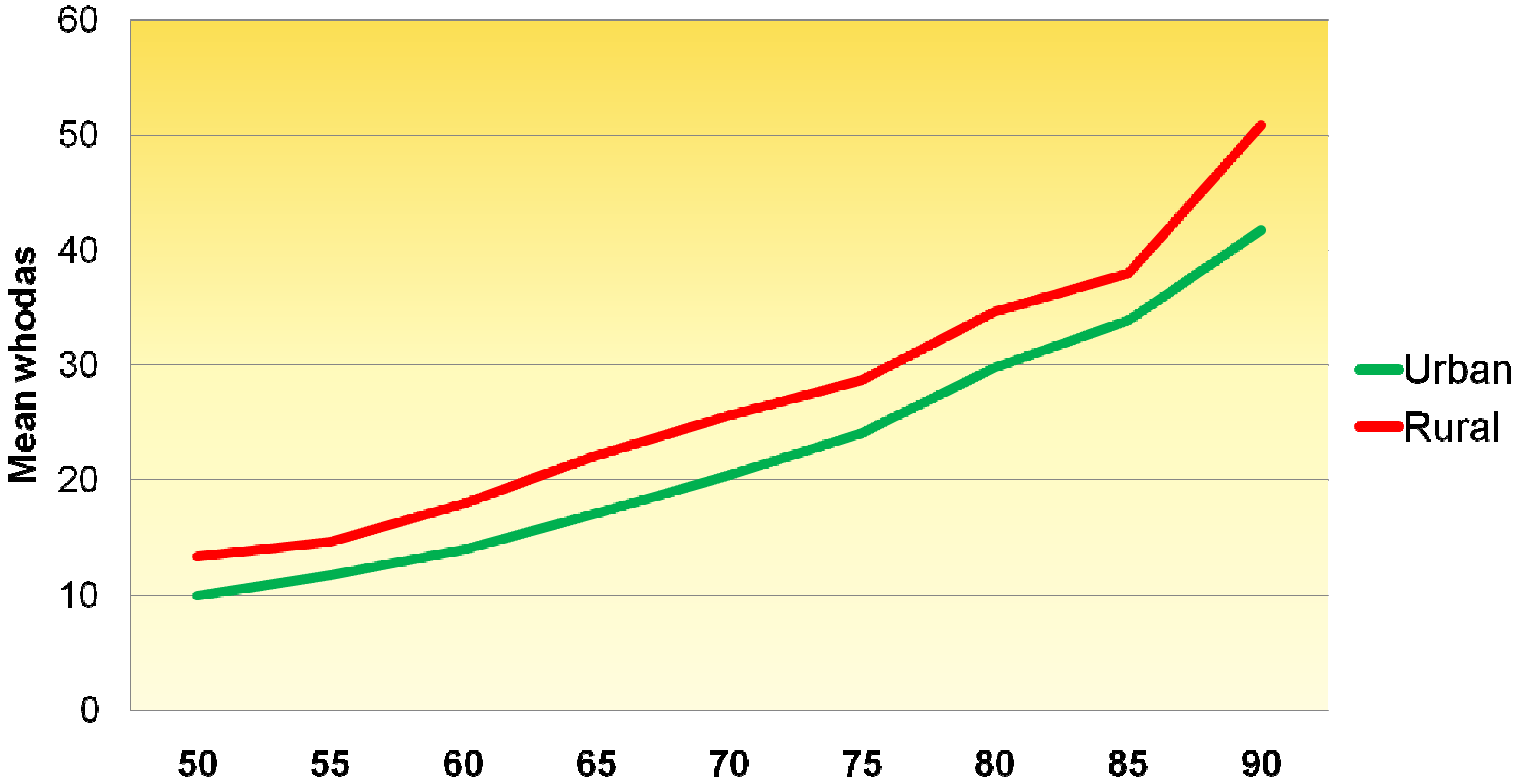








WHODAS by location



Conclusions

- Disability and or frailty increases by age
- Cross country comparison indicates worse situation in India and better situation in China. The other 4 participating countries are in in the middle, Ghana ..
- Males are better off
- Urban better than rural
- Educated better than less educated
- Married population slightly better

Conclusions II

- These observations are yet to be put to vigorous statistical tests and standardization.
- However, findings are consistent with general perceptions and can be explained in terms of access to health services, economic empowerment, ageing, and prevalence of risk factors.
- SAGE has provided us with tools/indicators that can be used across countries to monitor health of older populations as well as the strategies being developed to address the issues of ageing.

Conclusion III

- I thank you for your attention