Social distance, status and prestige:
Towards a unique measure?

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Continuos measures of social position

- Measures developed to represent the hierarchical ordering of occupational stratification include:

  - <u>Prestige</u> scales (SIOPS, several national scales)

  - <u>Socio-economic status</u> indexes (SEI, ISEI)

  - <u>Social distance</u> measures (CAMSIS, ICAMS)

  - <u>Social status</u> measures (C&G 2004)

Many measures, one dimension?

- Empirical research so far has found that the dimension underlying all measures is unique
  - See Kahl and Davis 1955; Featherman, Jones and Hauser 1975; Featherman and Hauser 1976; Kraus, Schild and Hodge 1978; Stevens and Featherman 1981; De Luca et al. 2012
  - Meraviglia et al. (2012) got to the same conclusion using internationally valid measures (ISEI, SIOPS, ICAMS)

International measures of occupational stratification

1. Occupational <u>prestige</u>: SIOPS
   (Treiman 1977)

2. <u>Socio-Economic</u> dimension: ISEI
   (Ganzeboom and Treiman 1992, 1996)

3. <u>Social distance</u>: ICAMS
   (Meraviglia, De Luca and Ganzeboom 2012)

# The ICAMS (International Camsis Scale)

- **Data from 41 countries in the ISSP 2001-2007 surveys**
  - N = 110 000
  - Original occupation coding in ISCO-88 3- and 4- digits
  - 193 occupational titles (after grouping low frequency titles)
  - Scores estimated for major, sub-major, minor and unit occupational titles in ISCO-88 (514)
  - Scores imputed to 13 ISCO-88 codes not present in the original data set

- **Modelled after the Camsis approach**
  - Husbands' $\times$ wives' occupation table
  - Scores estimated through RC-II association model (Goodman 1979; Clogg 1982)
- **Only the first dimension considered**
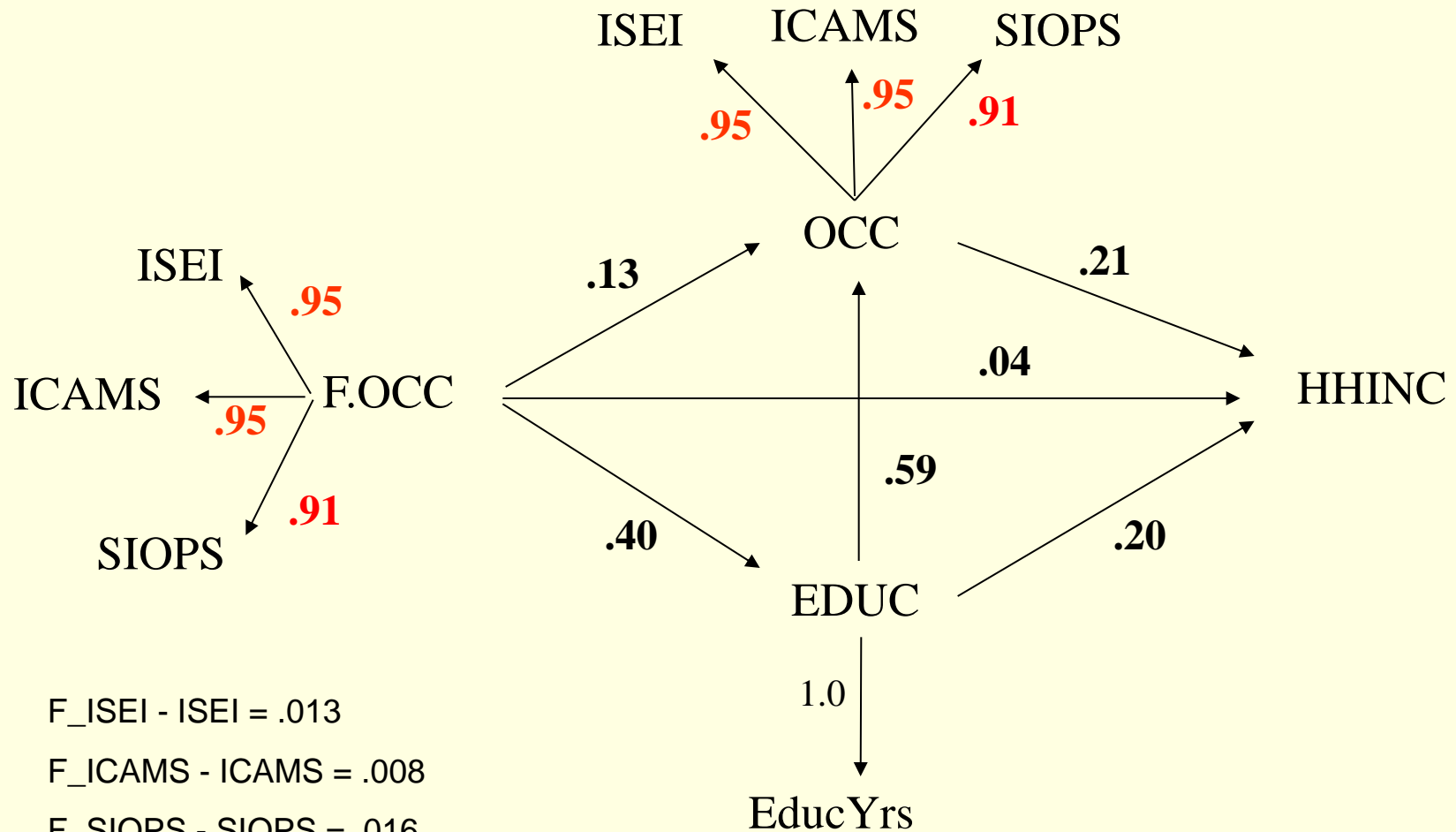
Validation of the ICAMS

- The ICAMS has undergone a set of validation analyses in different substantive contexts:
  1. Spouses model: how R's and S's occupation and education affect the HH income
  2. Intergenerational model: how F's occupation affects R's occupation and education, and all of them affect income
  3. Cultural consumption model: how R's and S's education (plus background variables) affect cultural participation
- Criterion-variables: ISEI, SIOPS, Educyrs
- Criterion-related and construct validity: confirmatory factor analysis (SEM)
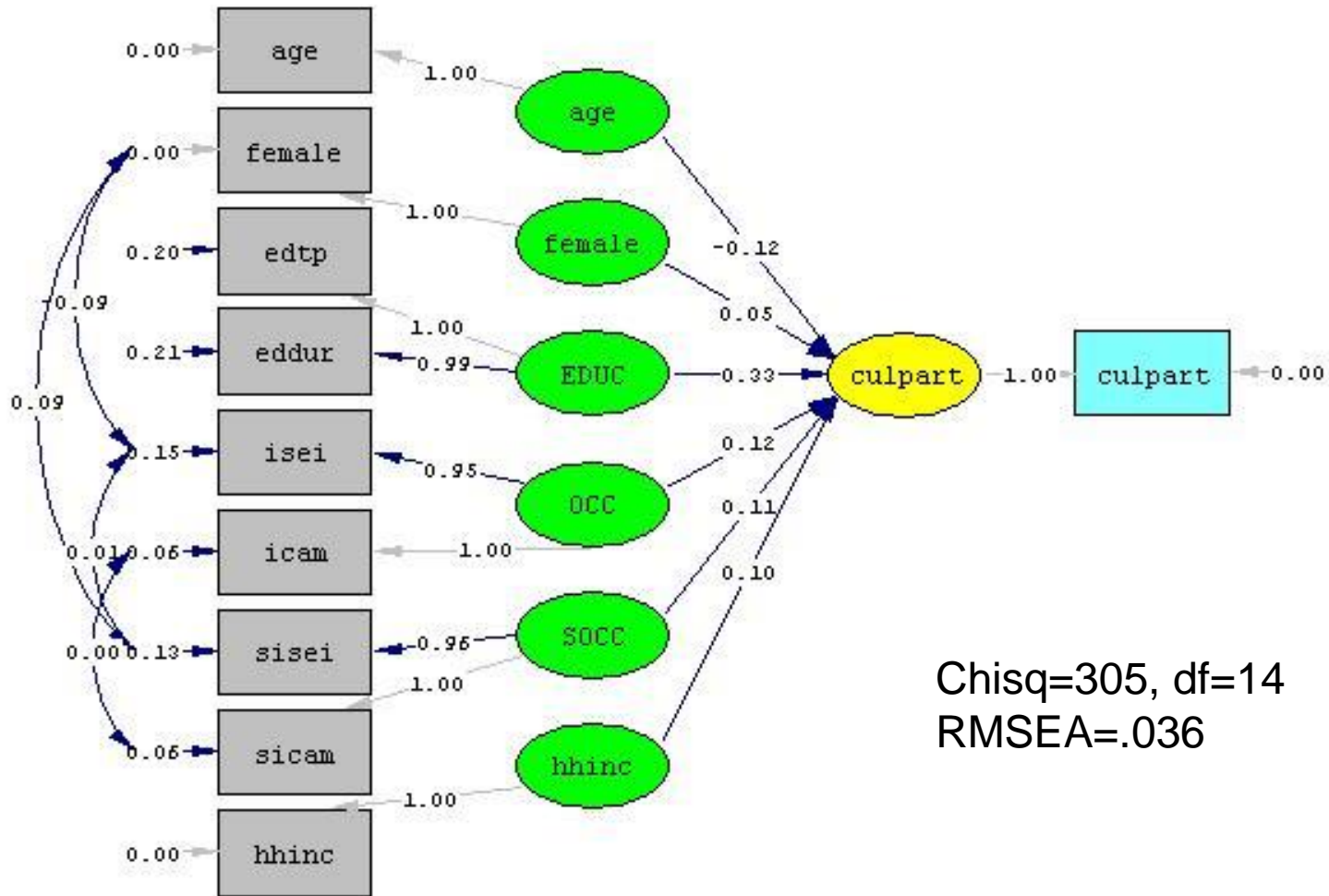
Previous research: Spouses model
(ESS 1-4, N=51000)

Chisq=751, df=17
RMSEA=.029
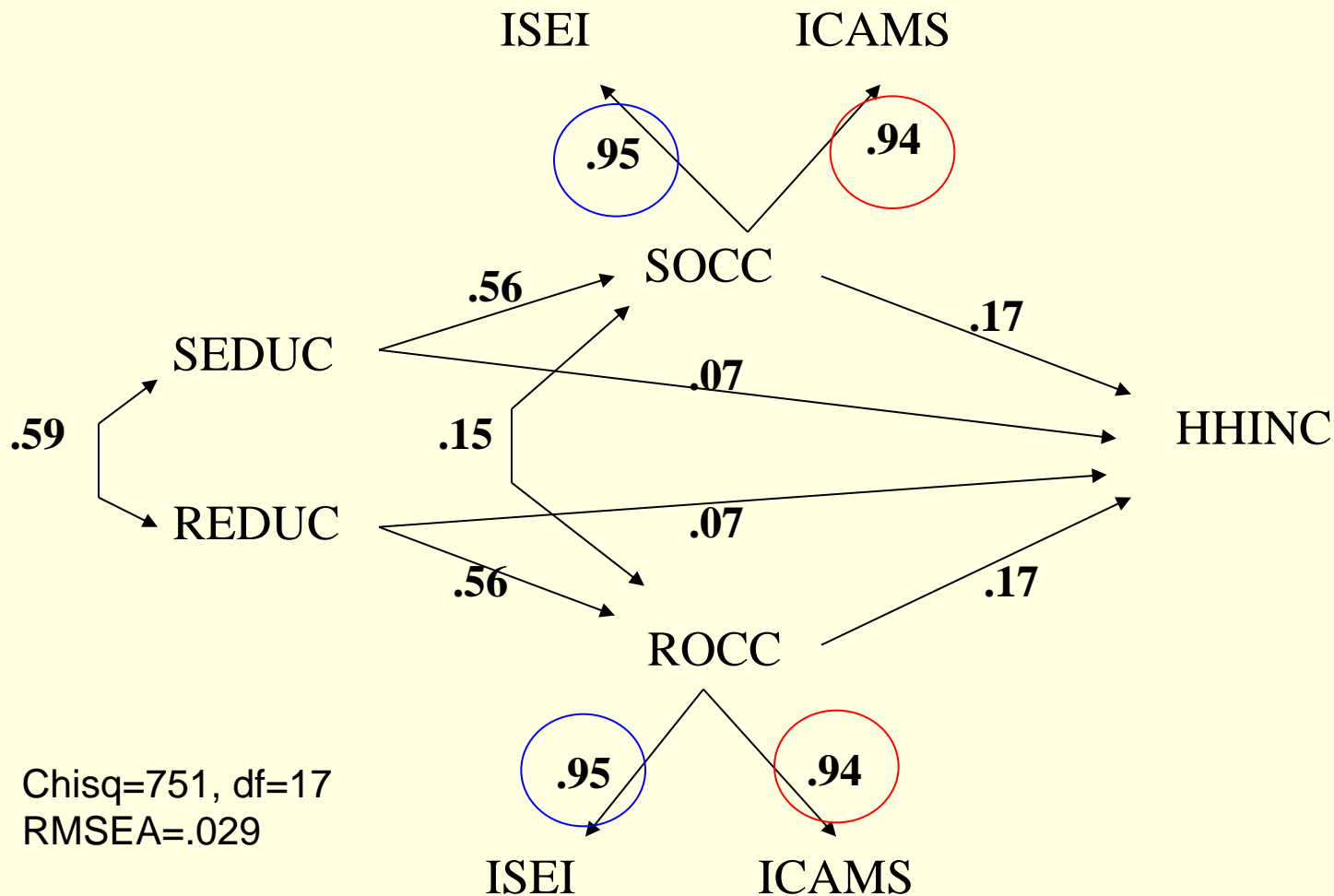
Previous research:
Intergenerational model (ESS 1-4, N=68000)

F_ISEI - ISEI = .013

F_ICAMS - ICAMS = .008

F_SIOPS - SIOPS = .016

Previous research: Cultural consumption model (ISSP 2007, N=16000)

Chisq=305, df=14
RMSEA=.036

Chi-Square=305.12, df=14, P-value=0.00000, RMSEA=0.036

A new validation step

- How does the ICAMS perform in comparison to national CAMSIS measures?

- 29 Camsis-like scales available for as many countries (http://www.camsis.stir.ac.uk/versions.html)

	Australia		Ghana		Portugal
	Austria/ Österreich		Hungary/ Magyarország		Romania
	Belgium/ België/ Belgique		Ireland		Russia
	Britain		Italy/Italia		Slovakia
	{Canada}		{Kenya}		Slovenia
	{Colombia}		Luxembourg		Spain/ Espaňa
	Czech Republic		Mexico		Sweden/ Sverige
	Denmark/ Danmark		Netherlands/ Nederland		Switzerland/ Schweiz/ Suisse
	{Estonia/ Eesti}		{New Zealand}		Turkey/ Türkiye
	Finland/ Suomi		Philippines		USA
	France		Poland/ Polska		Venezuela
	Germany/ Deutschland				Vietnam

Scores & codes

- Most countries provide CAMSIS scores for ISCO-88 4-digits codes, which makes it easier to calculate them on ESS- or ISSP-like data

Countries	Occupational classification
AU, FR, NL, ES	National
AT, DK, CZ, FI, DE, HU, IE, IT, RO, RU, SK, SI, SE, CH, USA	ISCO-88 4 dgt
TR	ISCO-68 4 dgt
BE, DK, LU, PL, PT	ISCO-88 2 dgt
GH, MX, VE, VN	IPUMS

Research question and hypothesis 1

1. Does the ICAMS perform as well as the Camsis_nat scales in each country in a given research domain? If so, we can say not only that ICAMS has criterion-related and construct validity at a general level, but also that it is valid against the national scales, then we can use ICAMS <u>instead</u> of the Camsis_nat scales

   - *Hypothesis 1: the Camsis_nat scales perform better, since they are tailored on each country*
   - *Alternative hypothesis 1: ICAMS performs better, since it picks up the relevant features common to occupational stratification in general, without overfitting to national contexts*

Research question and hypothesis 2

2. Is the latent construct implied by ICAMS, CAMSIS_nat and other continuous measures in each country unique?
    If so, we would provide a new piece of evidence in favor of a unique dimension underlying all occupational stratification measures, a conclusion valid across countries

    - *Hypothesis 2: the latent construct is unique, as implied by previous research results*

Data

- ESS rounds 1-4
  - Not all rounds covered by all countries
  - Not all countries/rounds with F's ISCO-88
- 13 countries in the analysis: AT, BE, CZ, DE, HU, IE, IT, LU, PL, RU, SE, SI, UK
- N = 42 734
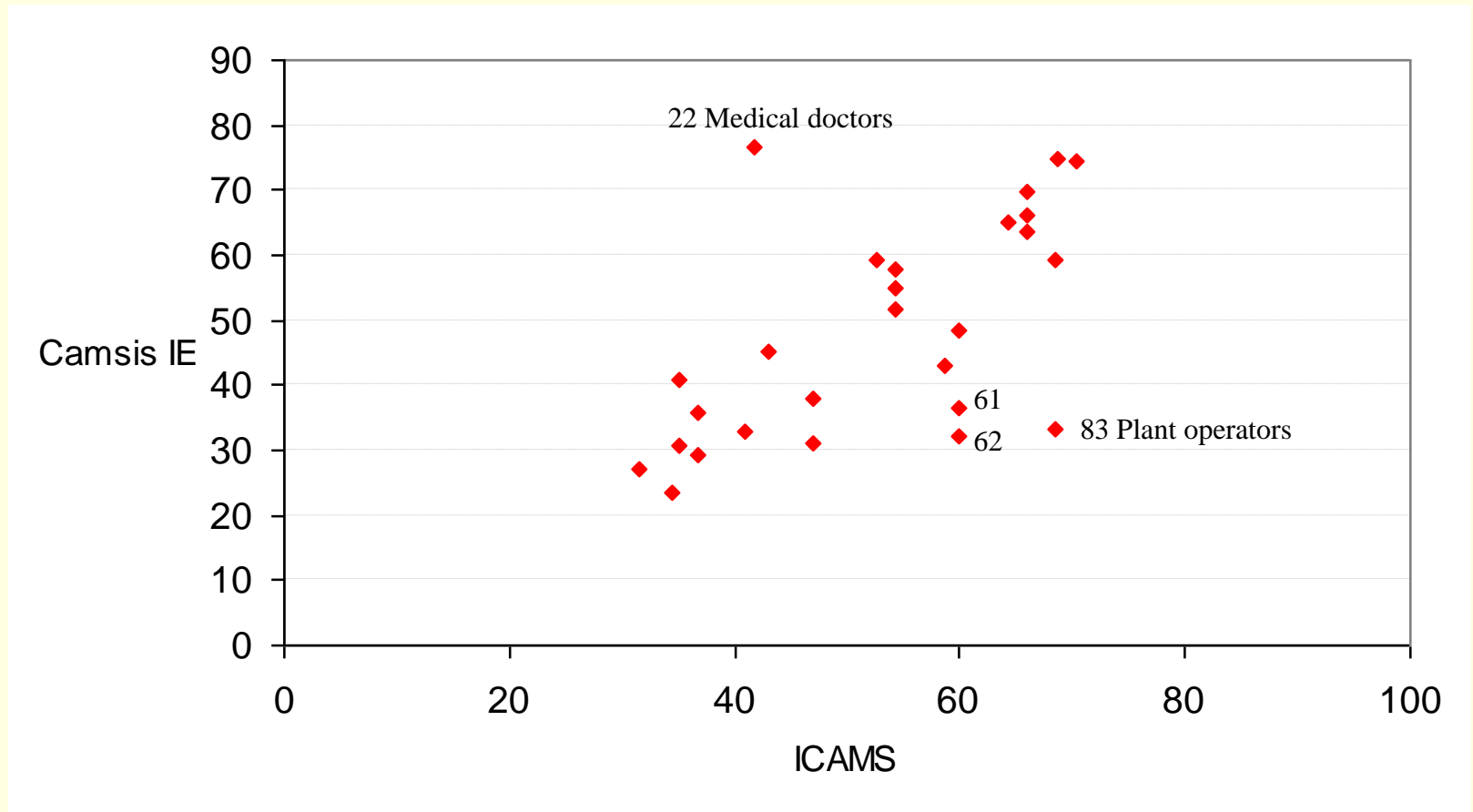- Some countries provide more data than others
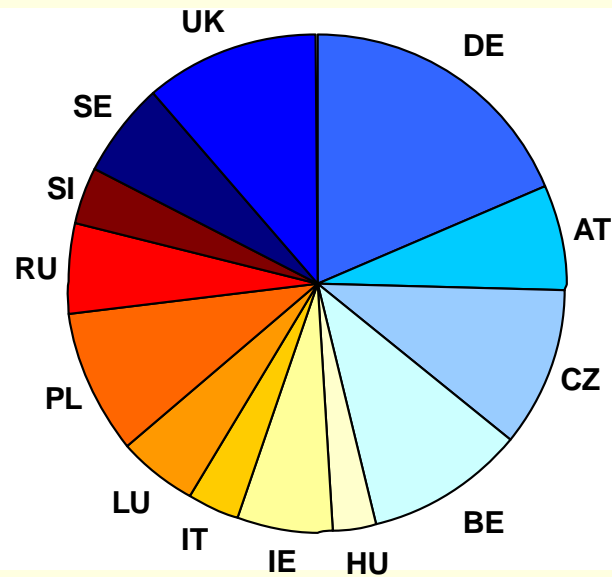
Correlations CAMSIS_nat - ICAMS

	F_OCC	*OCC*		*F_OCC*	*OCC*
AT	0.807	0.804	LU	0.859	0.887
BE	0.819	0.874	PL	0.864	0.864
CZ	0.900	0.880	RU	0.838	0.785
DE	0.876	0.897	SE	0.891	0.792
HU	0.867	0.892	SI	0.876	0.895
IE	0.648	0.762	UK	0.892	0.878
IT	0.894	0.950			

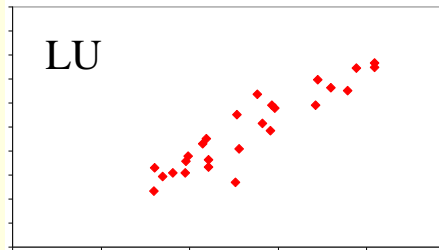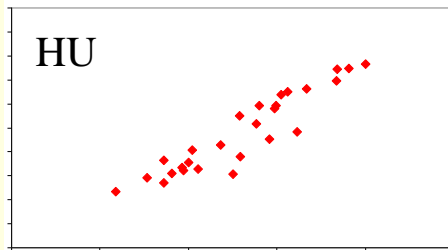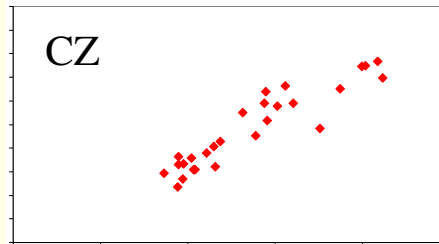# The highest correlation (Italy), …
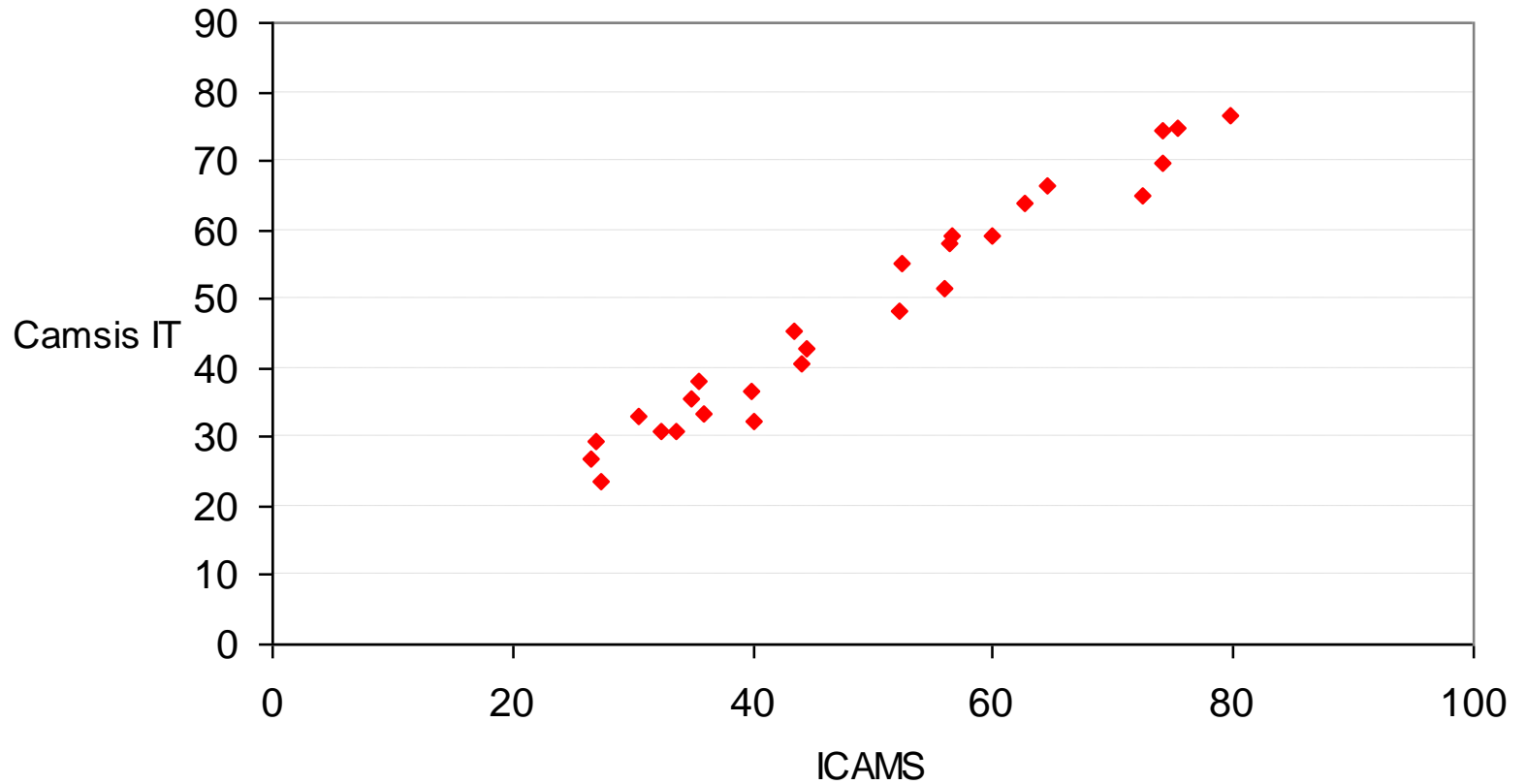
…the lowest one (Ireland) …

… and all other countries
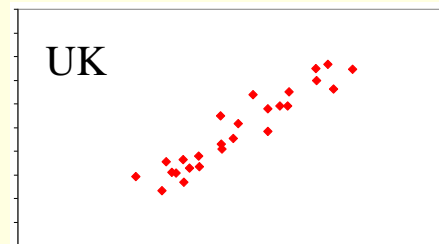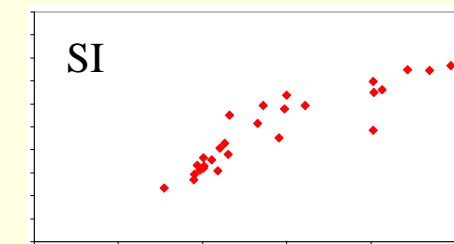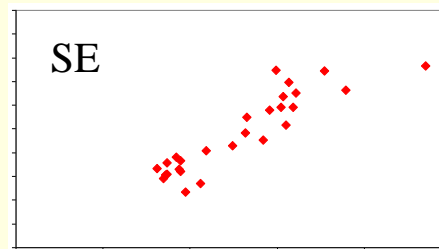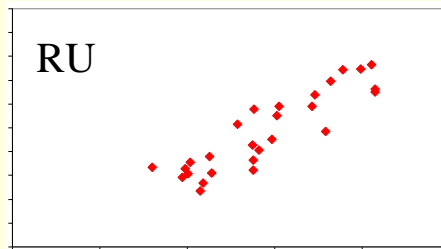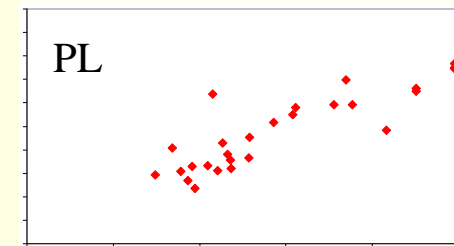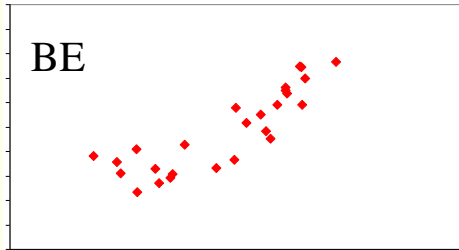
Models

- Confirmatory factor analysis (SEM)
  - Intergenerational transmission of social position (the O-E-D triangle)
- ISEI as criterion-variable
- Multiple-groups analysis
  - 13 groups = countries
  - Test for measurement equivalence

Variables

- Father's occupation and respondent's occupation
  - ISEI
  - ICAMS
  - CAMSIS_nat
- Respondent's education
  - Years of education (original measure)

The intergenerational model

EducYrs

EDUC

ISEI

ICAMS

F.OCC

CAMSIS_nat

ISEI

OCC

ICAMS

CAMSIS_nat
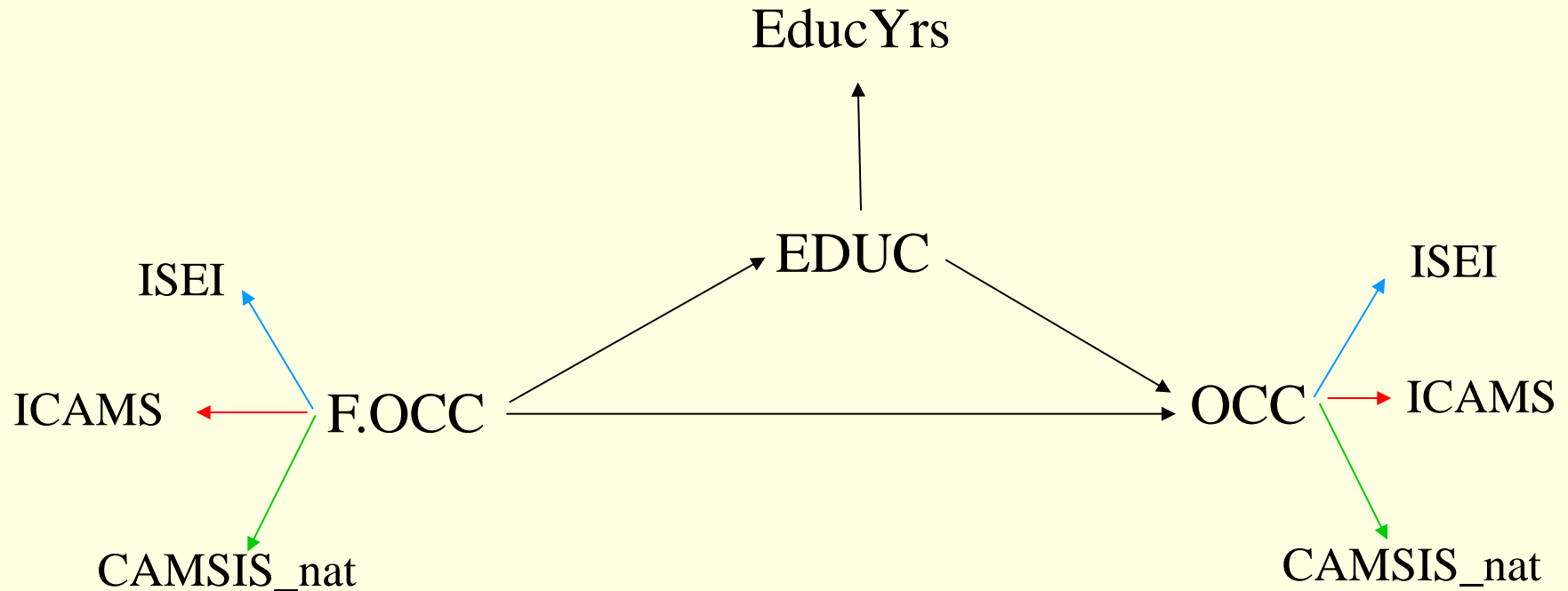
LY coefficients equal across constructs <u>within</u> country

Model fït

	Model	L^2	df	RMSEA
1	LY and BE invariant	5816	242	.069
2	LY and BE same pattern	3925	182	.065
3	LY and BE same pattern (equality constraints removed)	2756	156	.059
4	Model 2 + TE correlations (*)	2817	174	.056

(*) residual correlations between F_ISEI and F_CAMSIS_nat:

AT		CZ	IE	IT	LU	SI	UK
.030 (F)	.031 (R)	.032	.271	.056	.097	.035	.023

Parameters
(LY eq for F and R within country; LY(ISEI)=1)

	ICAMS	CAMSIS_nat
Czech Republic	1.05	1.01
Germany	1.06	0.99
Hungary	1.01	1.00
Italy	1.07	1.04
Luxembourg	1.07	1.01
Poland	1.04	1.04
Slovenia	1.03	0.99
United Kingdom	1.04	0.99
Austria	1.05	0.96
Belgium	1.11	0.94
Ireland	1.10	0.86
Russia	1.05	0.86
Sweden	1.06	0.98

Here ICAMS is as good as CAMSIS_nat
(and better than ISEI)

Here ICAMS is better than CAMSIS_nat (and ISEI)

Conclusions (1)

- Hypothesis 1 (national measures are better than ICAMS) has not been confirmed, in favor of the alternative hypothesis 1:
  - In 8 countries ICAMS is <u>as good</u> an indicator of social position as the national measures (and better than ISEI)
  - In the remaining 5 countries (AT, BE, IE, RU, SE) the ICAMS is a <u>better</u> indicator than both the national measures and ISEI
- In sum, we can say that the ICAMS can be effectively used as an indicator of social position even when the analysis is not comparative in purpose, instead of nationally-valid measures (and ISEI)

Conclusions (2)

- **Hypothesis 2 has been confirmed:**
  - Actually, in the case of father's occupation, ISEI and the national CAMSIS measures share a unique component, as shown by the significant (though of modest entity, apart from IE) residual correlations between ISEI and CAMSIS_nat in 7 out of 13 countries (and, in the case of AT, for respondents too)
  - However this unique component can be seen as bias in measurement, since it does not affect the between-generation process

Two major implications

1. We can consider this validation exercise (together with previous evidence) either:

   1a) as providing further evidence of the uniqueness of the dimension underlying occupational stratification measures,

   1b) or as a methodological artifact due to the fact that all measures are based on the same indicator of social position, namely occupation

2. In case we favor 1a), how are we to explain that measures built using different procedures and techniques, and relying on different theoretical backgrounds, all refer to a single underlying construct?

1) Good reasons in favour of occupation

- Occupation has been chosen as the (sole) indicator of social position since the Fifties (Hatt 1950; Runciman 1968)
- In a Durkheimian perspective, the justification lays in the fact that occupation is at the core of the process of social stratification, which derives from the social division of labour
  - "Individuals are distributed within [society] in groups that are no longer formed in terms of any ancestral relationship, but according to the special nature of the social activity to which they devote themselves" (Durkheim 1983/1984, 132)
  - Hence, when building an empirical measure of the occupational hierarchy, we are in fact building a representation of the broader social stratification
- In a Weberian perspective, occupation subsumes political, cultural and economic resources in a single *locus*, which is "at once the most obvious symptom and the most effective predictor of differential location within the structure of social inequalities" (Runciman 1968, 55)

Any other indicator/method?

- In order to ascertain beyond reasonable doubt that the dimension underlying all continuous measures is unique, we should use an entirely different (but still valid) indicator of social position

- If a measure built on this alternative indicator correlates with existing measures (all based on occupation), then the uniqueness hypothesis would receive further support

An example:
Chapin's status scale (1933)

- One of a few examples of a continuous measure of social status not based on occupation is the *Living Room Scale* (Chapin 1933, 1940; Guttman 1942)

- It is built on the evaluation of the "equipment and condition of living rooms of urban homes" (Guttman 1942, 362)

- The assumption is that "the material culture articles of living room equipment… reflect the attitudes of the members of the family… [and that they] condition the attitude of others towards the family and consequently determine the social position in the community" (Chapin 1933, 3)

- (see next slide)

TABLE 3. THE 1933 WEIGHTS AND THE REVISED WEIGHTS
FOR CHAPIN'S SOCIAL STATUS SCALE

Items	1933 Weight	Revised Weight
Part I: Material Equipment and Cultural Expression of the Living Room		
1. Floor: softwood	6	8
hardwood	10	14
2. Large rug	8	6
3. Windows with drapes, each	2	4
4. Fireplace with 3 or more utensils	8	34
5. Artificial light: electric	8	12
kerosene	− 2	− 3
6. Library table	8	− 1
7. Armchairs, each	8	4
8. Piano bench	4	5
9. Personal-social desk	8	2
10. Bookcases with books, each	8	3
11. Sewing machine	− 2	2
12. Couch pillows, each	2	1
13. Alarm clock	− 2	− 5
14. Periodicals, each	8	2
15. Newspapers, each	8	8
16. Telephone	8	24
17. Radio	8	8
Part II: Condition of Articles in Living Room		
18. Cleanliness of room and furnishings:		
a. Spotted or stained	− 4	−19
b. Dusty	− 2	−10
c. Spotless and dustless	2	10
19. Orderliness of room and furnishings:		
a. Articles strewn about in disorder	− 2	−20
b. Articles in place or in usable order	2	20
20. Condition of repair of articles and furnishings:		
a. Broken, scratched, frayed, ripped, or torn	− 4	−16
b. Patched up	− 2	− 8
c. In good repair and well kept	2	8
21. General impression of good taste:		
a. Bizarre, clashing, inharmonious, or offensive	− 4	− 5
b. Drab, monotonous, neutral, inoffensive	− 2	− 3
c. Attractive in a positive way, harmonious, quiet and restful	2	3

Chapin's status scale items and weights

30

A common latent factor?

- Guttman (1940) finds that the Chapin's scale shares a common component with some key variables
- The sample is however quite unadequate (67 homes of African-Americans in Minneapolis)…
- According to Guttman "It would be desirable to have an intensive analysis of the fluctuations of intercorrelations and factor patterns from sample to sample, especially for various parts of the country" (1940, 369)
- This task has still to be undertaken

Variable	*Commonality*
Occupation	.55
Income	.68
Participation	.48
Education	.63
1933 Scale	.79

2) How should we explain our findings?

- Suppose we agree that the evidence concerning the uniqueness of the construct underlying all continuous measures is correct
- Accordingly, we should agree that:
  - Social stratification is a single "object"
  - It can be seen either as a prestige, or status, or social distance, or socio-economic hierarchy
  - Each measure is a more or less valid indicator of that hierarchy, depending on the empirical instance in which it is used
- As a consequence, these concepts might be distinct on a theoretical and analytical ground, but they are not on the empirical one
- How do we reconcile this standpoint with the deeply-rooted view sociologists have of how society and social stratification are structured?

A proposal

- A theoretical model which:
  - works at a micro-macro level
  - brings together several study traditions (Lenski 1966; Berger and Luckmann 1966; Bourdieu 1977, 1979; Bourdieu and Passeron 1970; Goffman 1951, 1956, 1959; Shils 1965, 1968, 1975)
  - has a dynamic and a structural component
  - is intended to clarify the theoretical relationships between the core concepts of stratification theory in light of the empirical evidence arrived at since the '50s
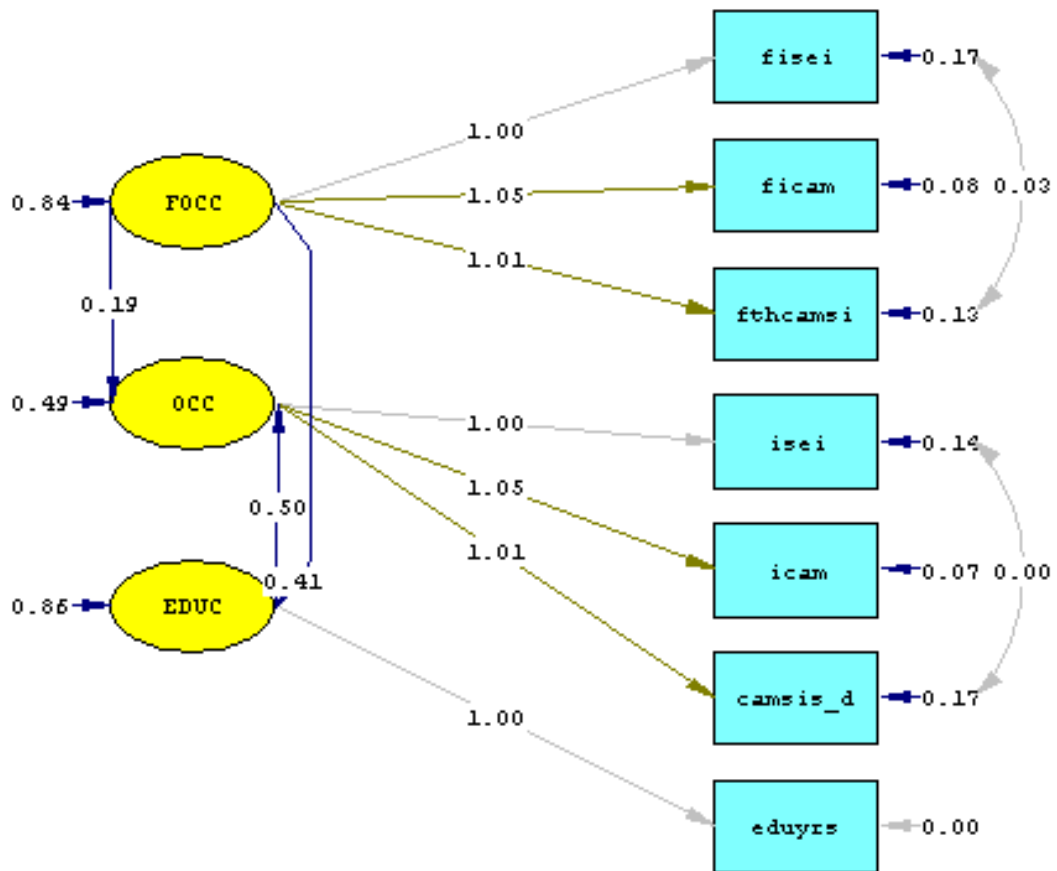
The model (Meraviglia 2012)

Macro

Power → Privilege

x, y, z

P ↓ L ↑

Symbolic power (ideology) → **Prestige** → **Status** → **Occupational hyerarchy**

Micro

Rules of conduct, status rituals, *connubium* → Deference behaviours → Deference entitlements: occupation

Dynamic   Structure
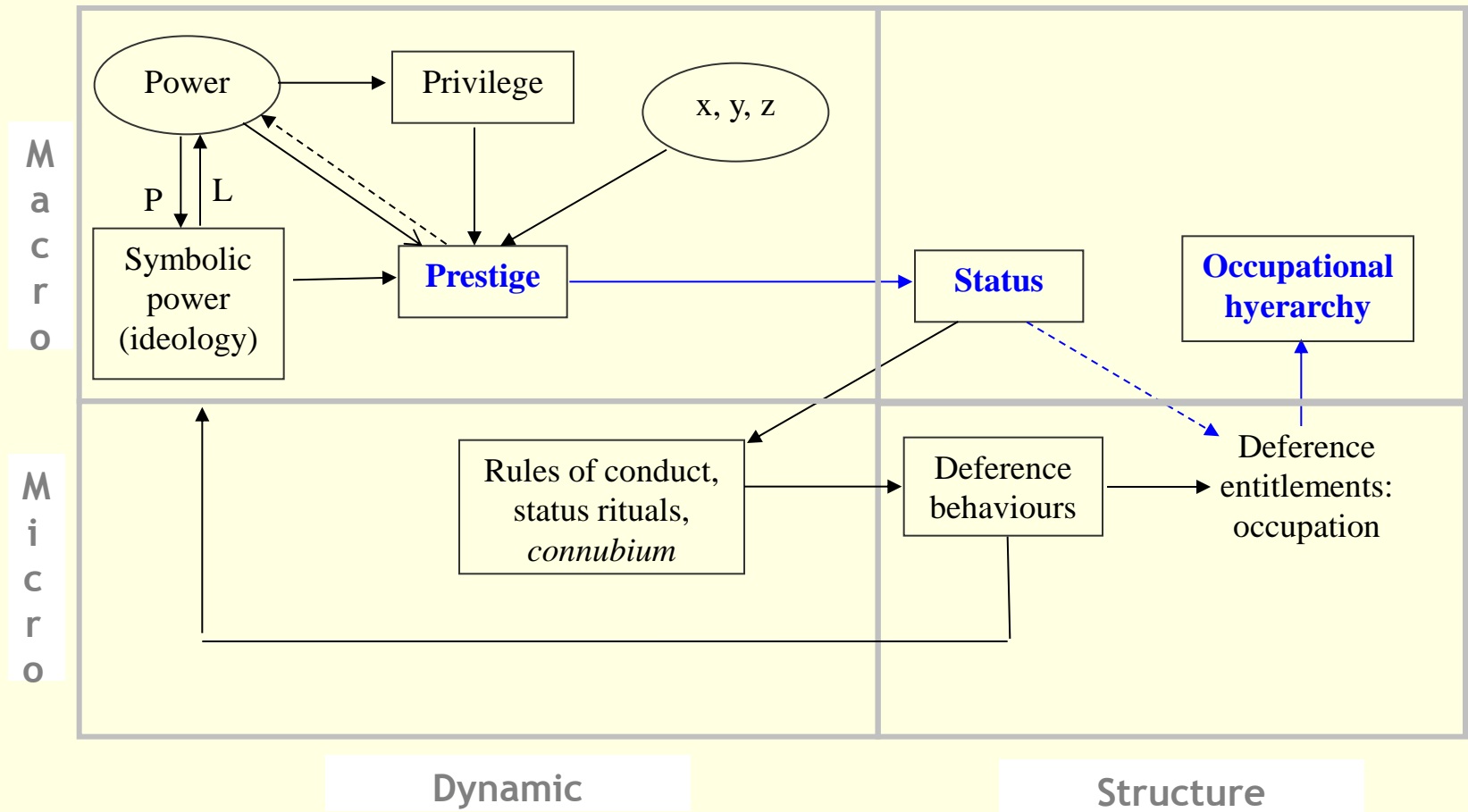
Thank you!

Extra slides

Model 4, AT

Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056
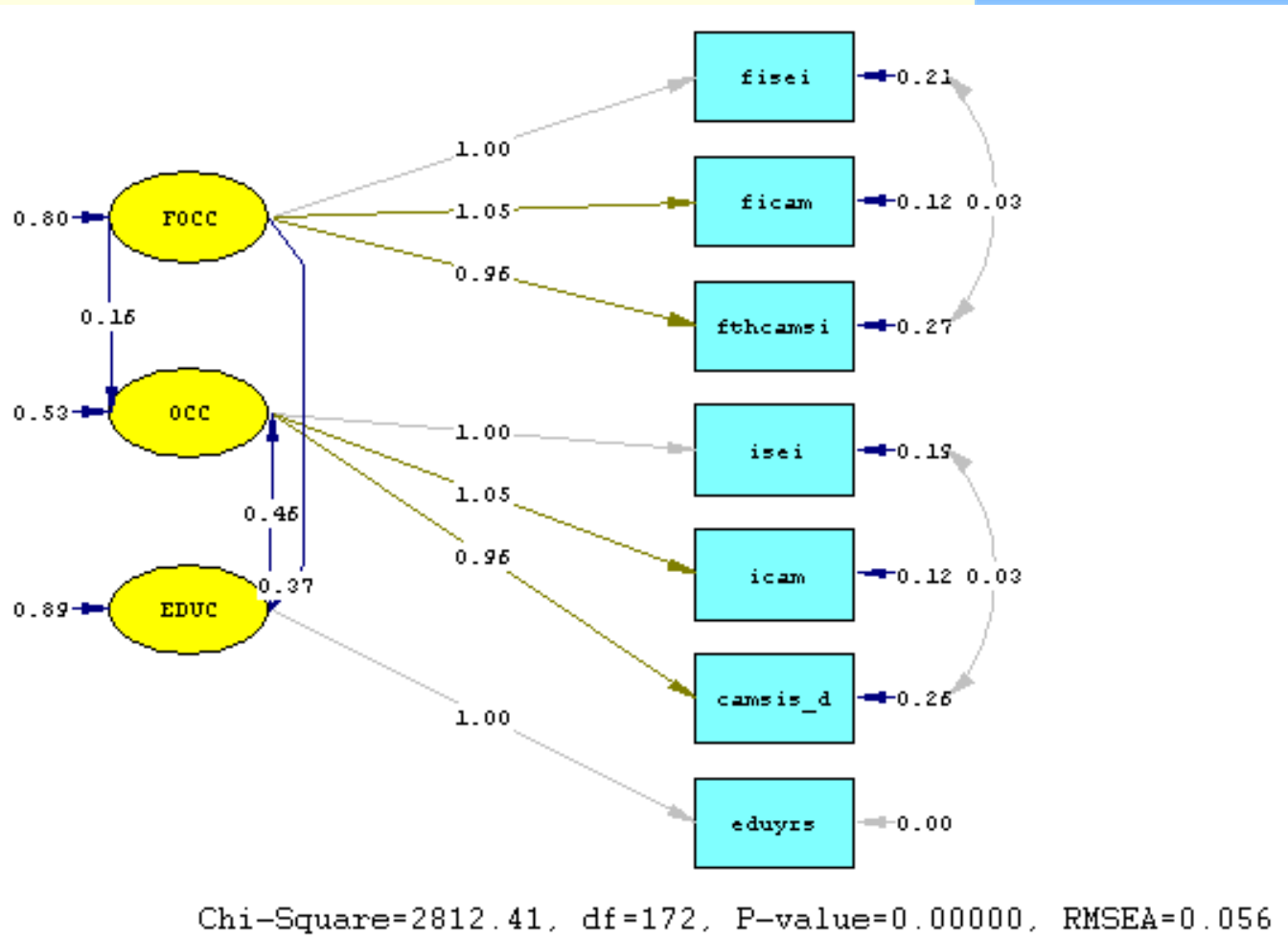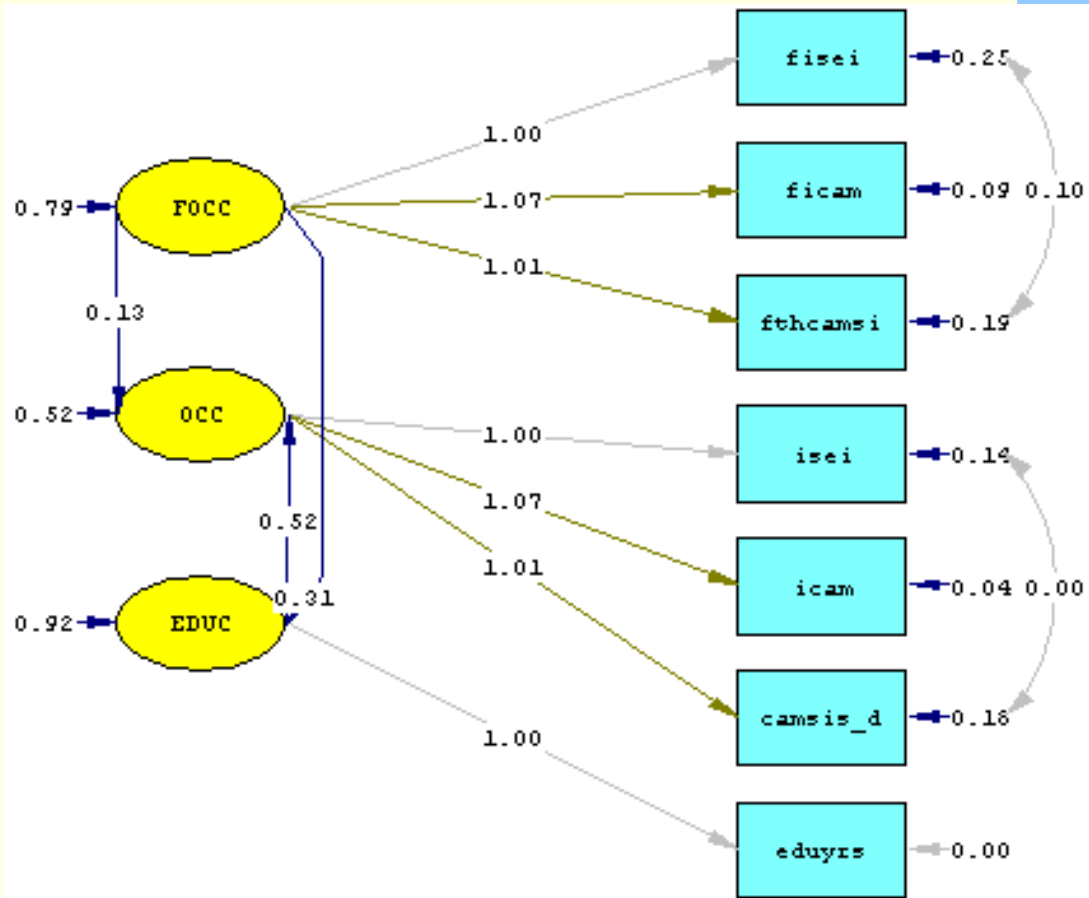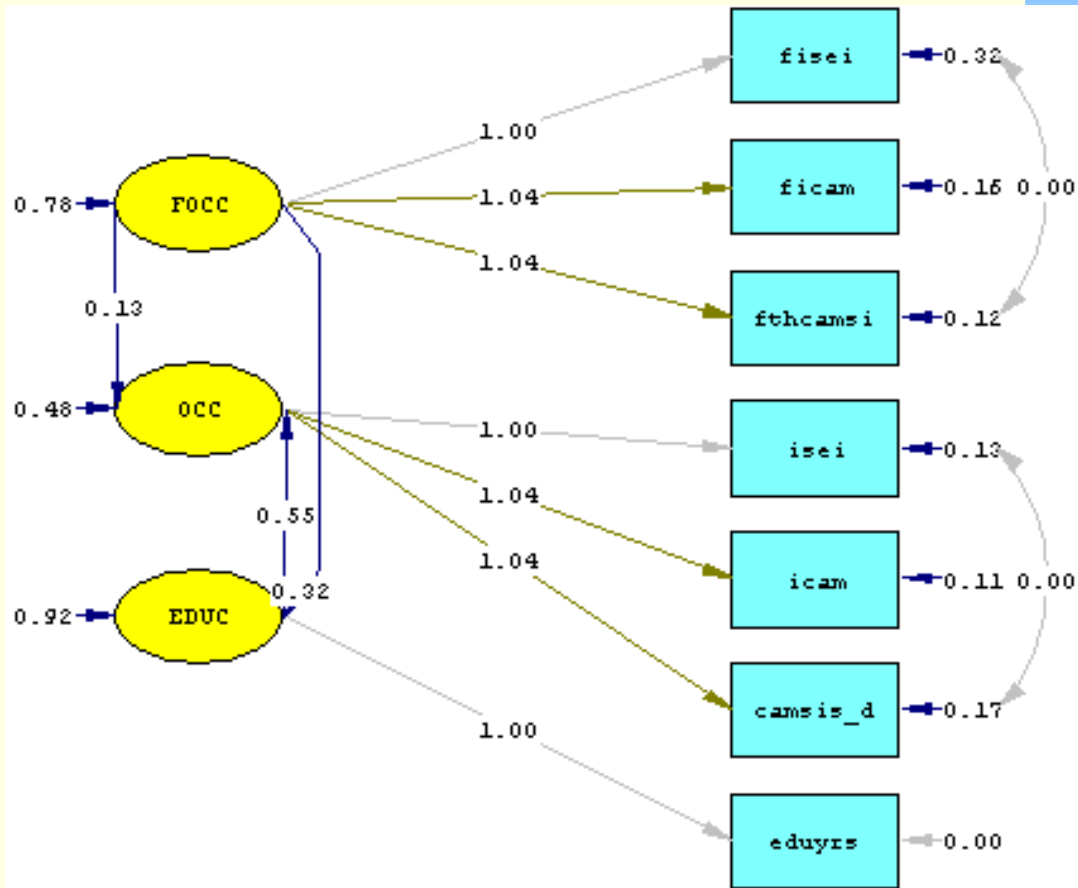
Model 4, CZ

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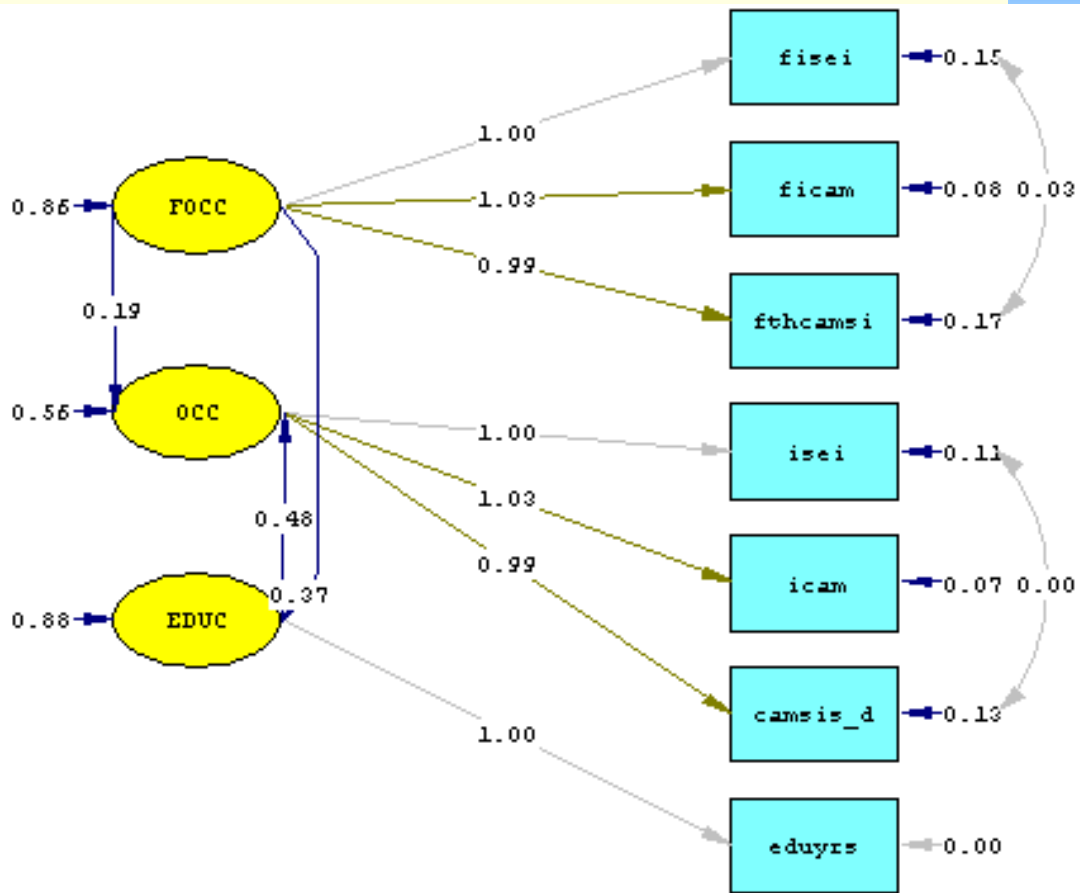
Model 4, DE
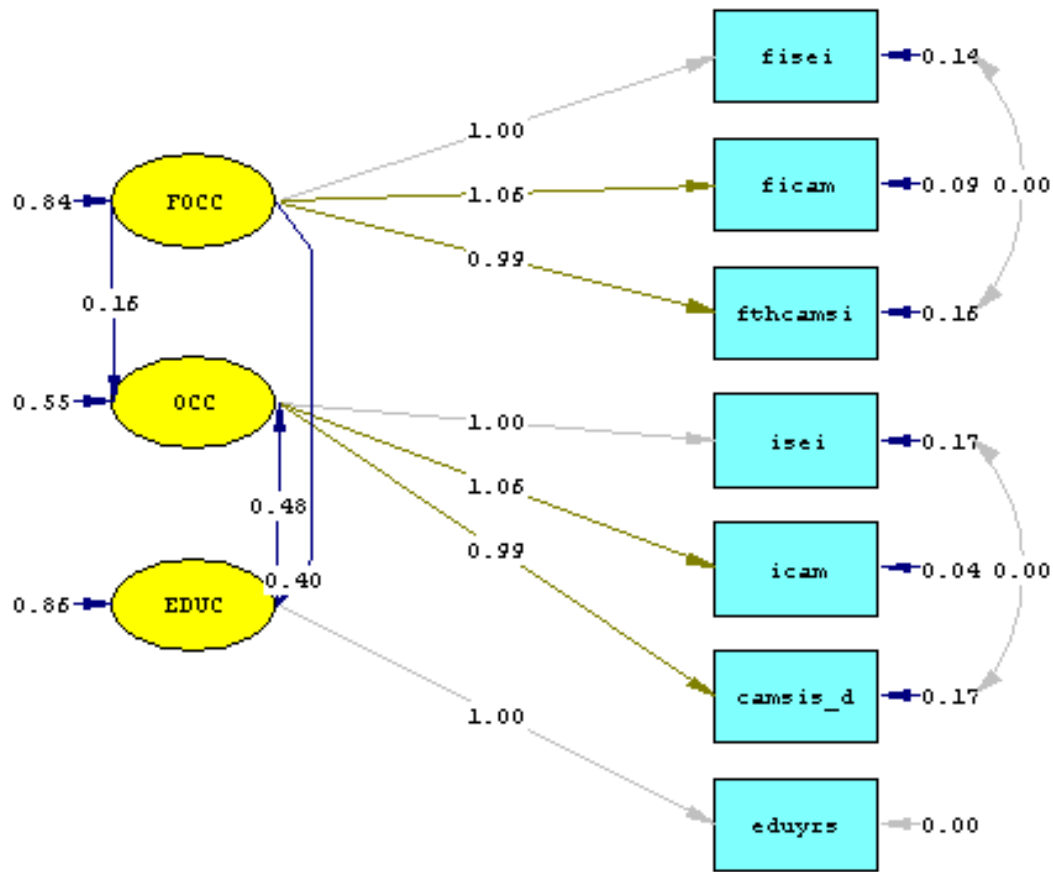
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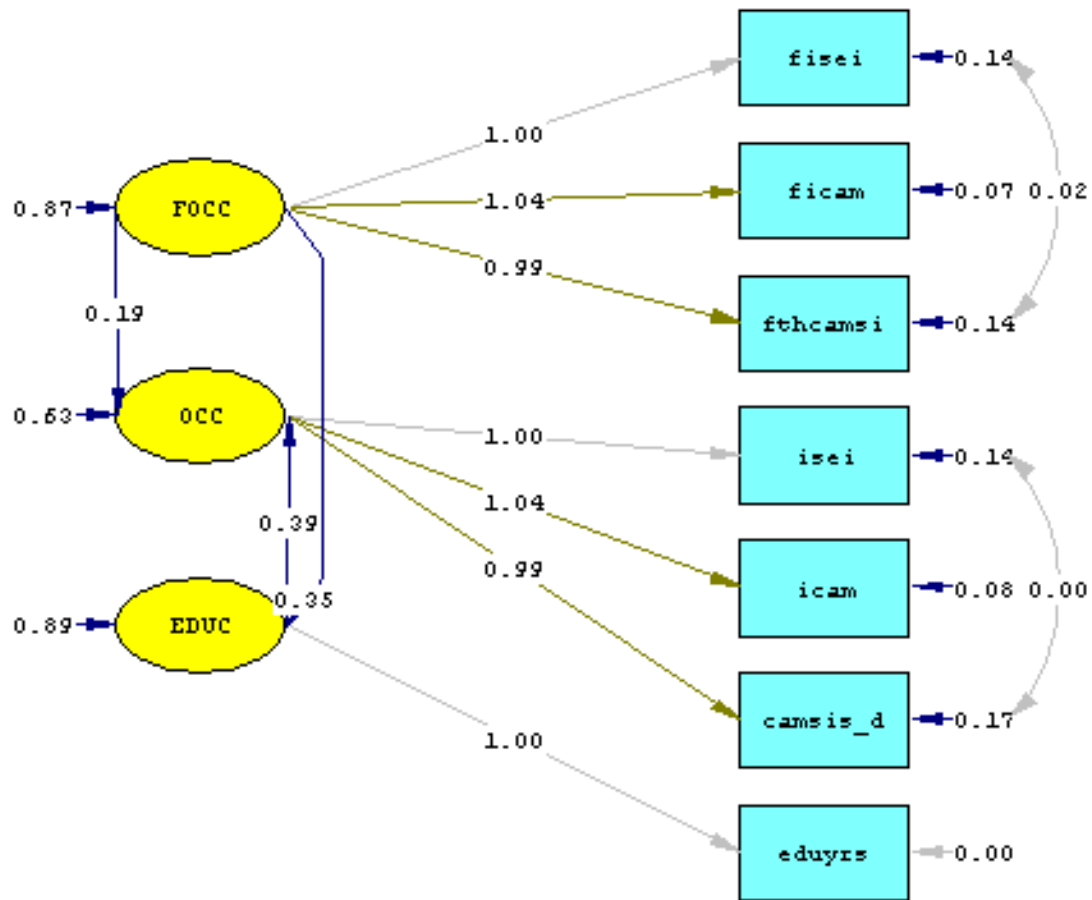
Model 4, HU
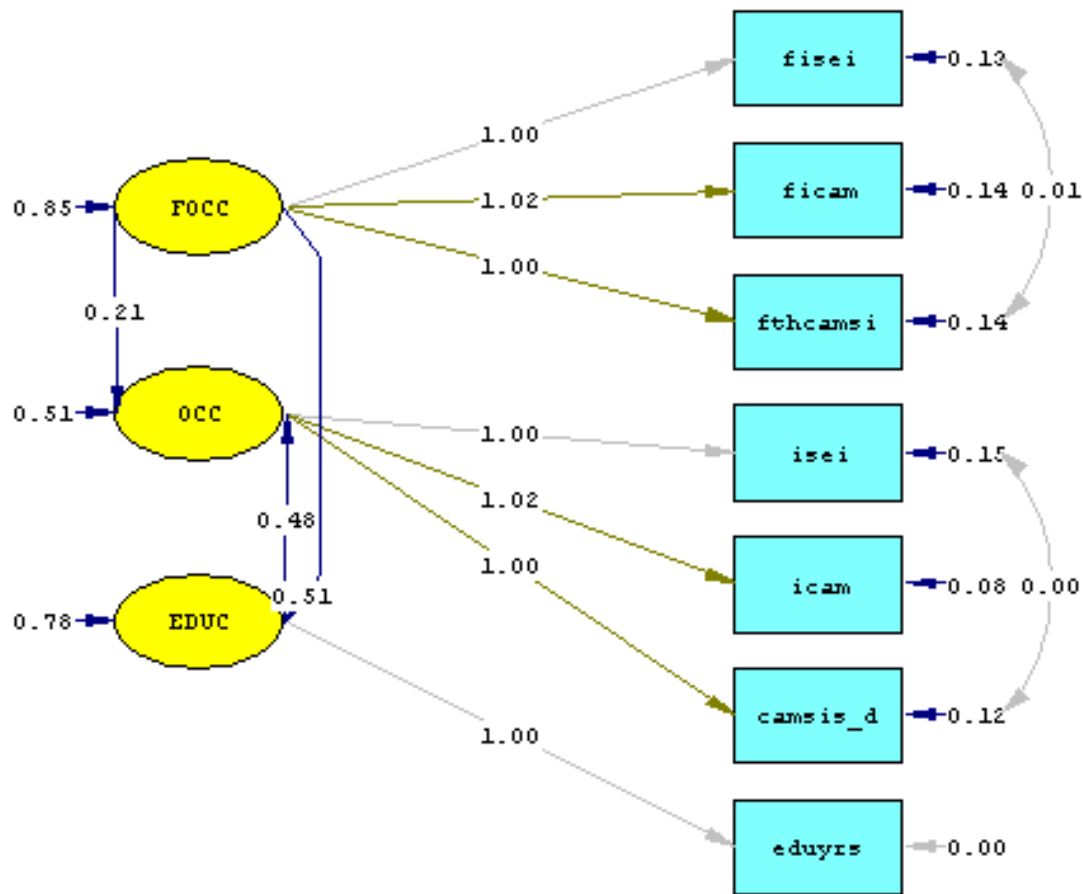
Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056

Model 4, IT
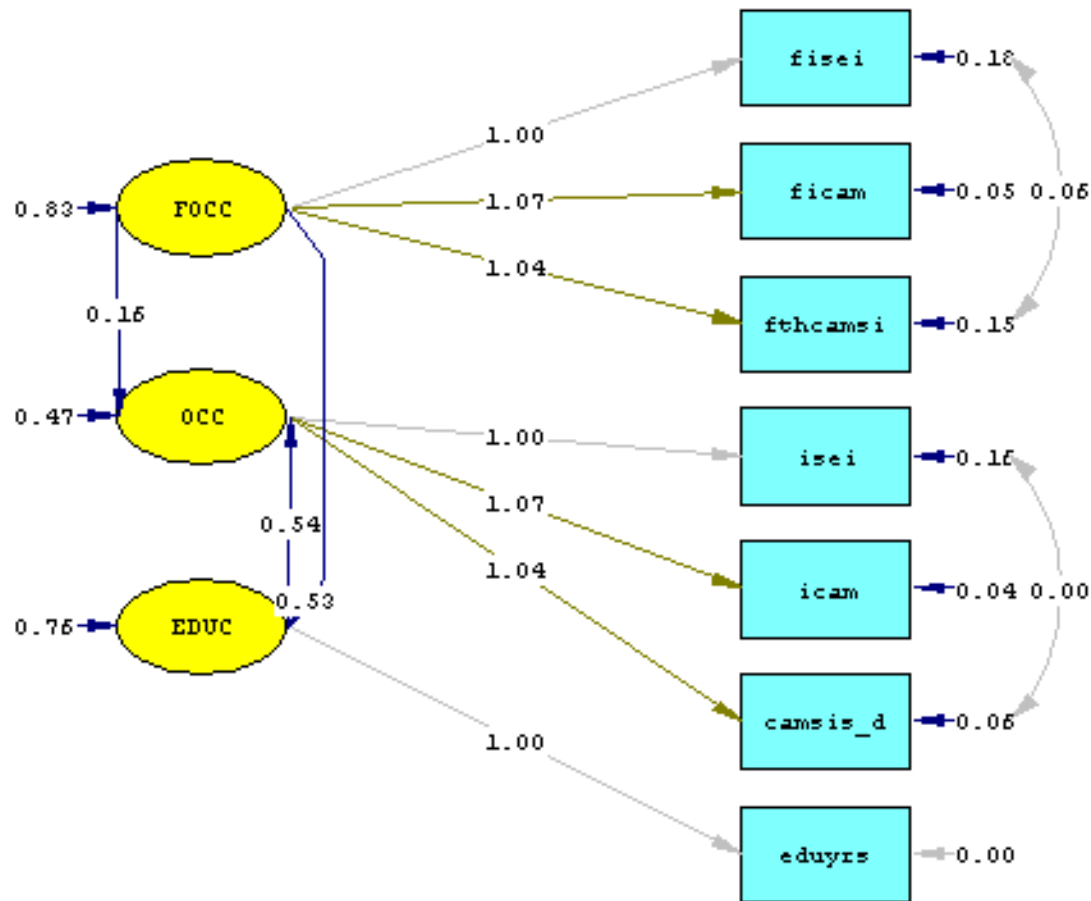
Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056

Model 4, LU

Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056

Model 4, PL

Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056
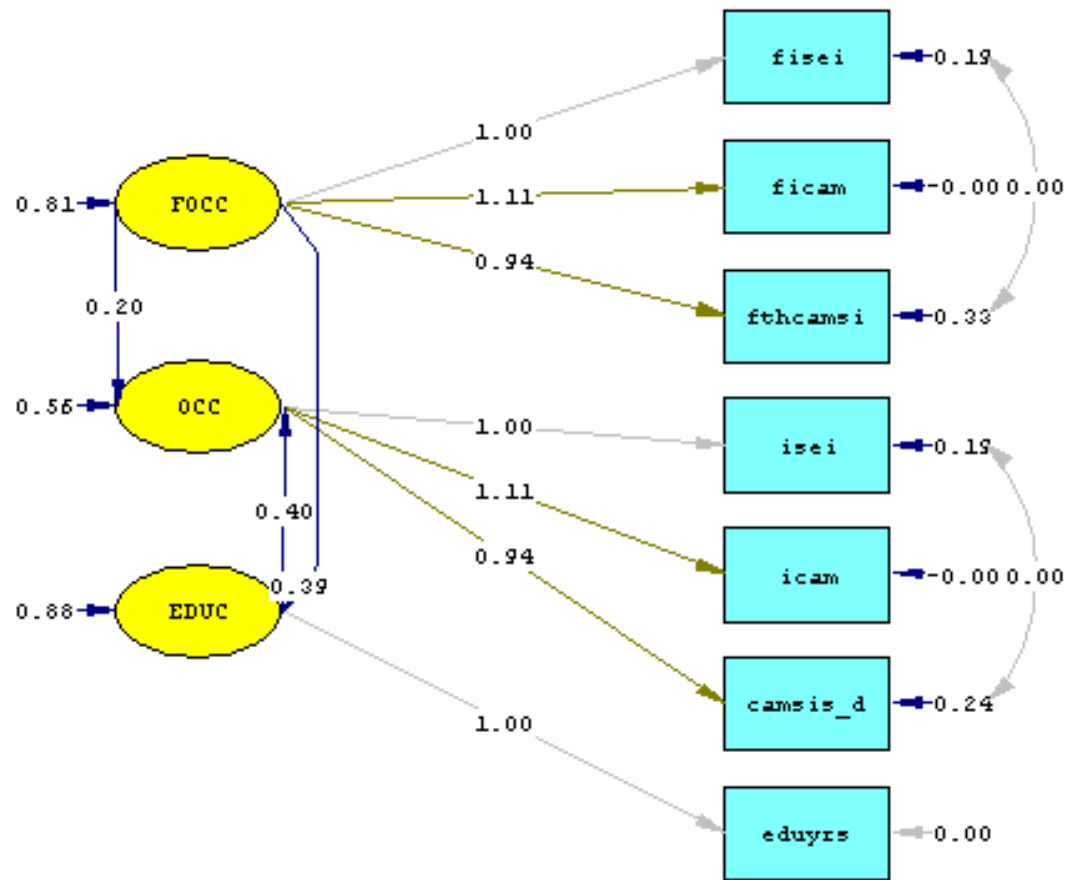
Model 4, SI

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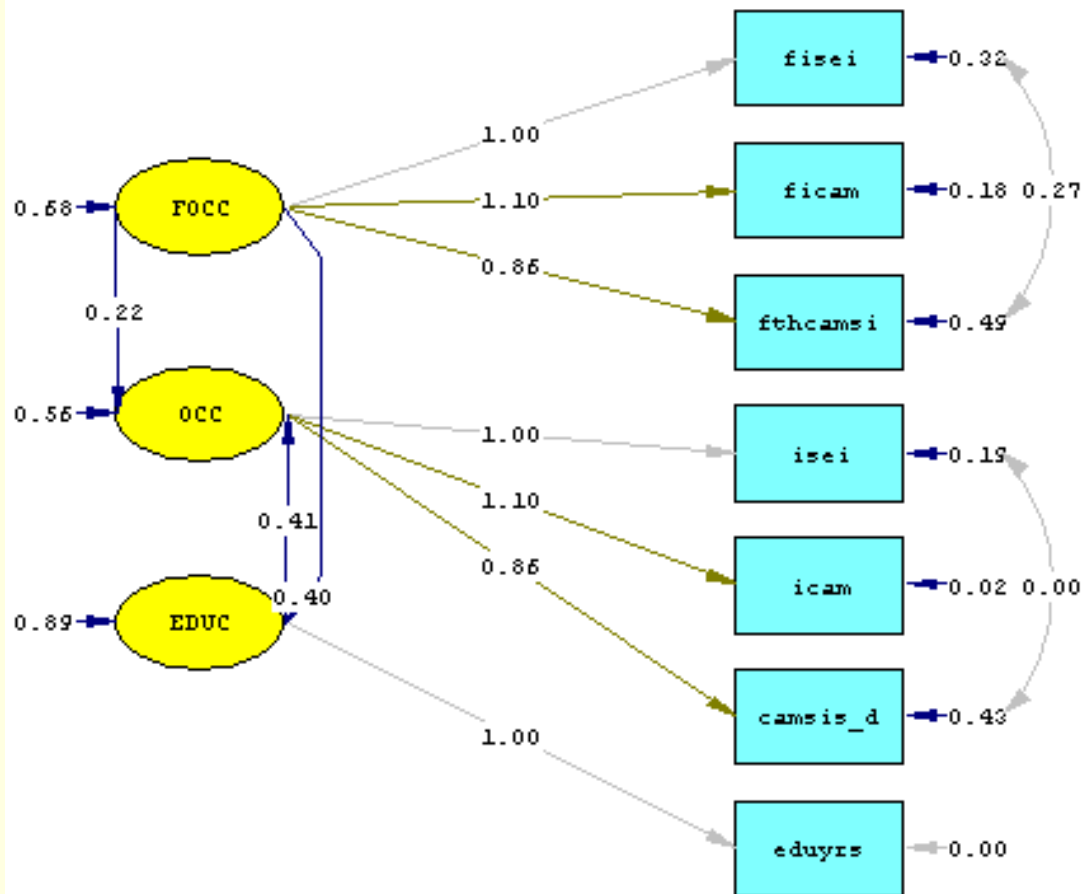
Model 4, UK

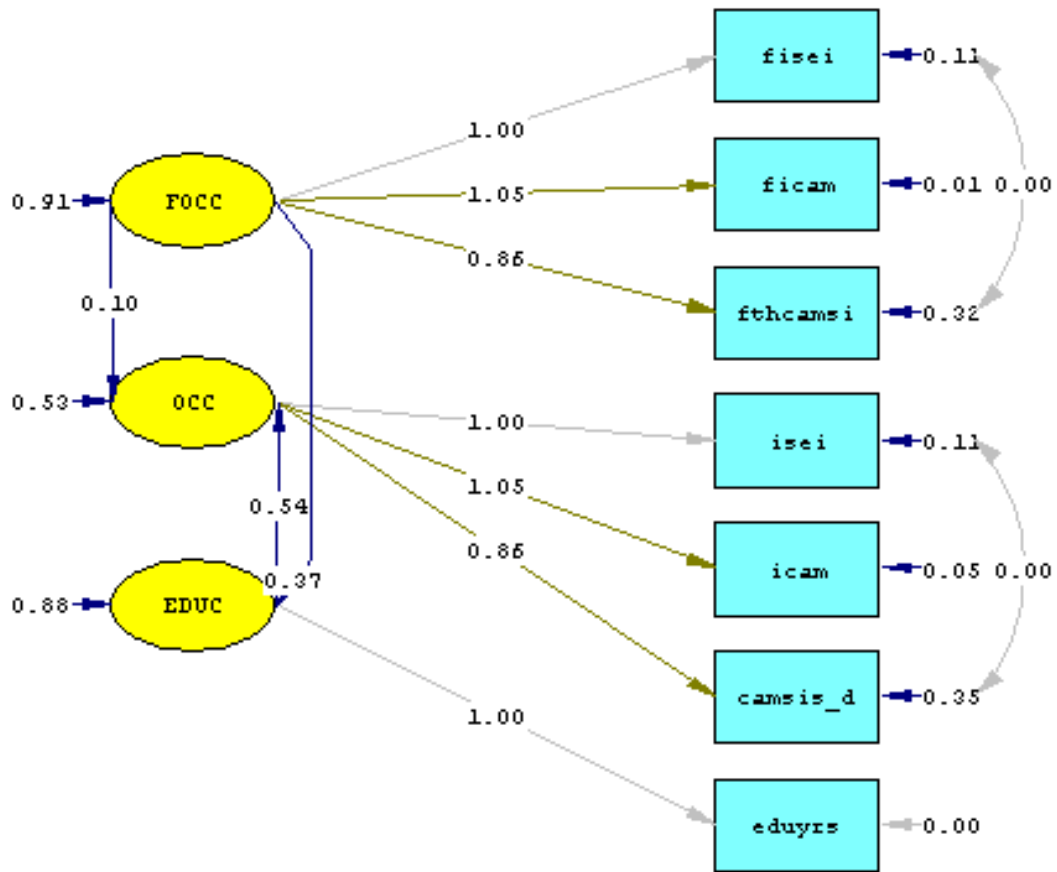Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056

Model 4, BE

Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056

Model 4, IE

Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056

Model 4, RU

Model 4, SE

Chi-Square=2812.41, df=172, P-value=0.00000, RMSEA=0.056