Health Inequalities in Germany: Assessing Differences in Health of Migrants and Native Germans Using a Propensity Score Matching Approach and the SF-12 Physical and Mental Health Scale

Manuel Holz (M.Sc.) Chemnitz University of Technology

Research Question

Are health differences between migrants and native Germans equal across migrational groups?

The Healthy Immigrant Effect (HIE)

> […] an observed time path in which the health of immigrants **just after migration** is substantially **better** than that of comparable native-born people, but **worsens with additional years** in the new country
>
> McDonaldy & Kennedy (2004, S.1613)

Cross-sectional observation : Recent Migrants have a health advantage

Longitudinal observation : Non-Recent Migrants have a declining health advantage

Evidence for the HIE

Self-reported health status (Castiñeira et al., 2013, Puyat, 2013; Nolan, 2012; Newbold and Danforth, 2003; McDonald and Kennedy, 2004; Vang et al. 2015; Hamilton et al., 2009, Kwak 2016, Subedi and Rosenberg, 2014, Kennedy et al., 2015)

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Mortality (Razum et al., 2002, Razum et al. ,1998; Zur Nieden et al., 2016)

Changing the comparison Group

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Using a native internal migrant group should lead to an observed decline of the health advantage

Hamilton (2015)

Methods

Logistic regression model → chance to get the **treatment** (e.g. being a migrant)

The prediction obtained from this model = **Propensity Score**

Comparison of individuals on the basis of the Propensity Score

Calculation of the Average Treatment Effect on the Treated (**ATT**)
→ Difference of **potential outcomes** for **migrants** and their **equivalent** german "**counterparts**"

Data & Measures

Data from the SOEP 2016

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Excluded : refugees, tourists, hinc > 20.000 EUR, age > 65, high GDP countries (AUS, USA, BENELUX, UK, F, A, CH, Scandinavia)

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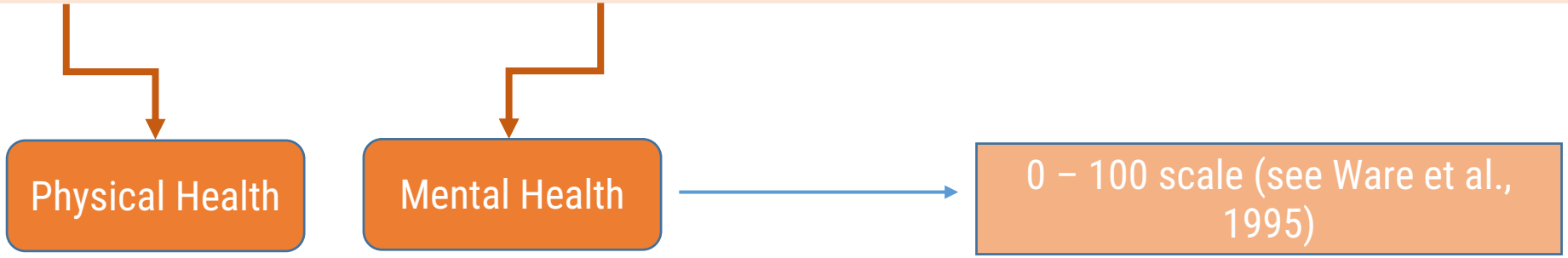

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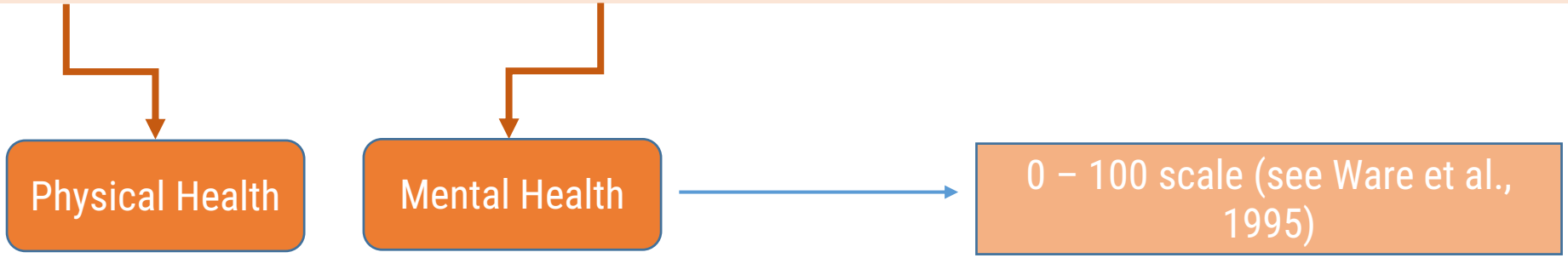
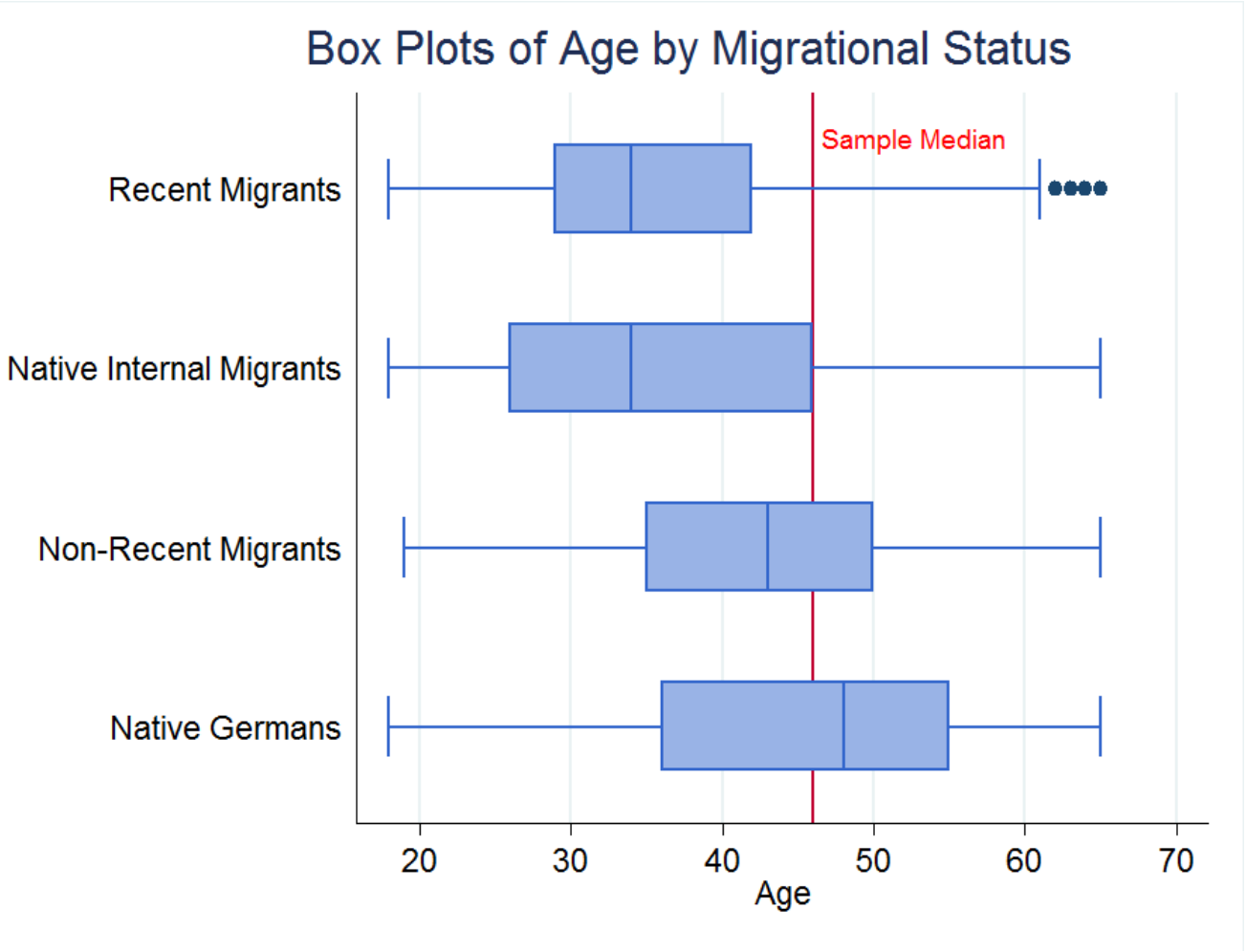


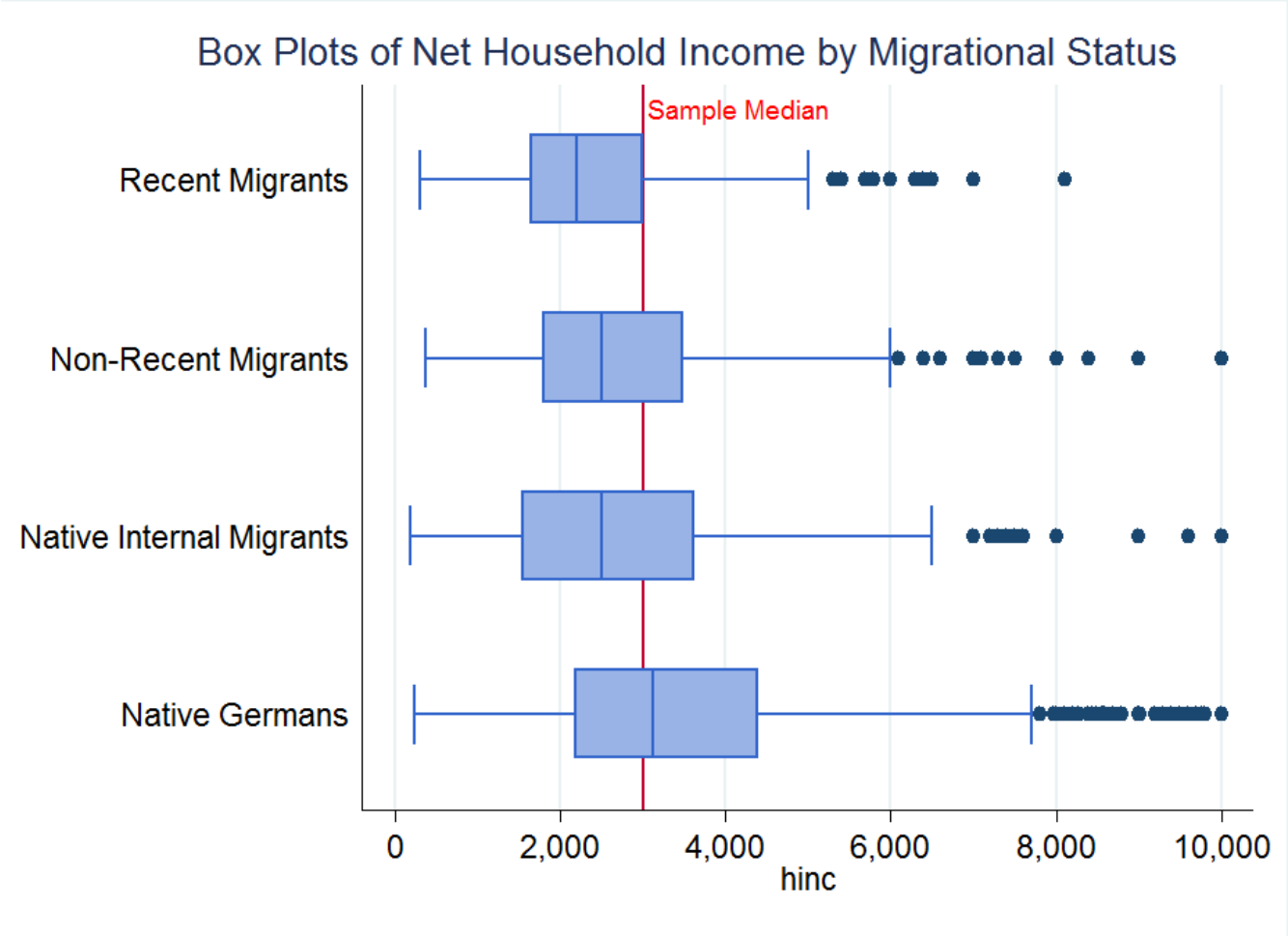
Recent Migrants: Foreign born to foreign born parents, years since migration **≤ 10**
Non-recent migrants: Foreign born to foreign born parents, years since migration **> 10**
Native Germans: Born in Germany to in Germany born parents
Native Internal Migrants: native Germans, moved within the borders of Germany in the last year or founded a new household

Age Distribution by Migrational Status



Recent migrants : n = 794
Non-recent migrants : n = 1147
Native Germans : n = 10011
Native internal migrants : 864

Income Distribution by Migrational Status



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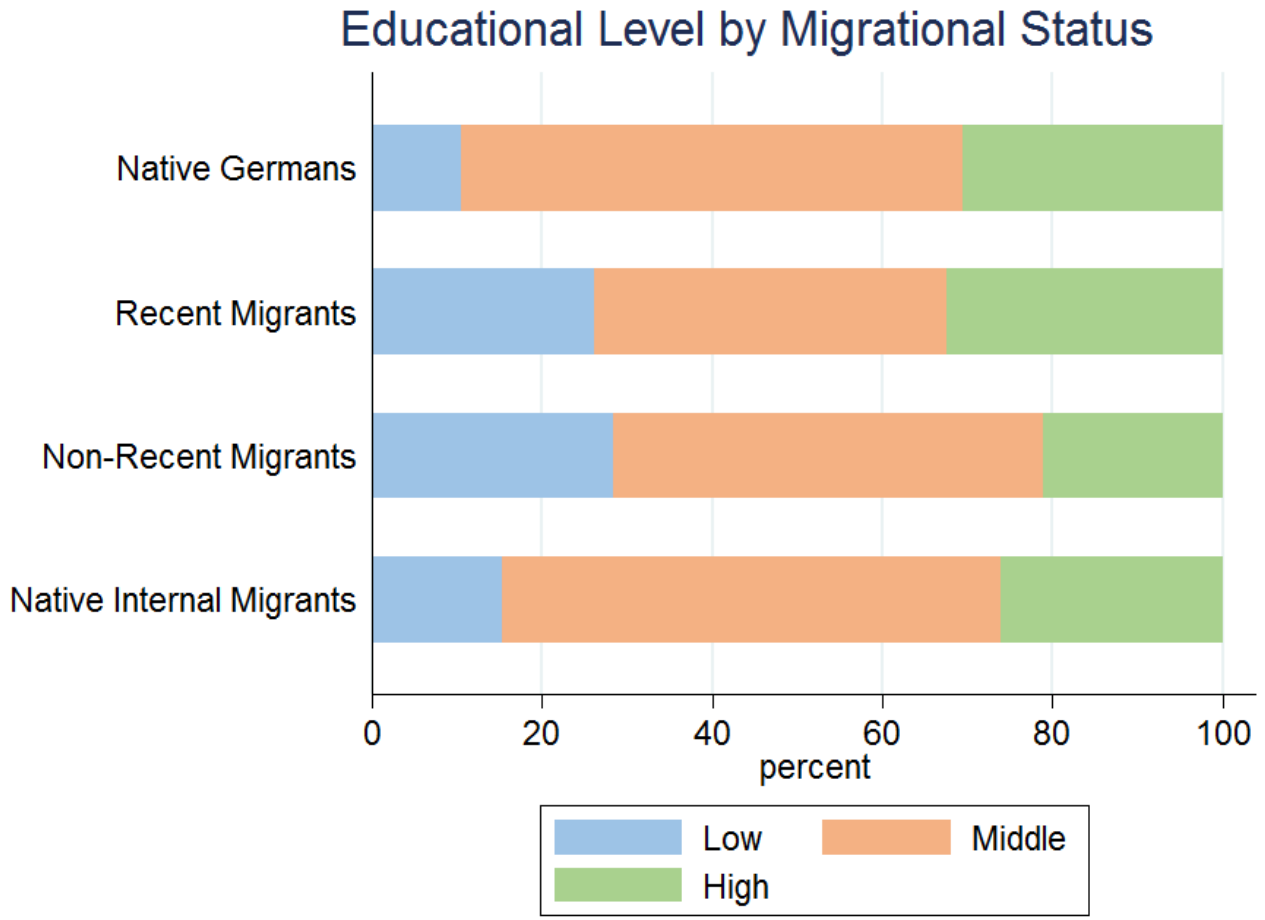
Educational Level by Migrational Status



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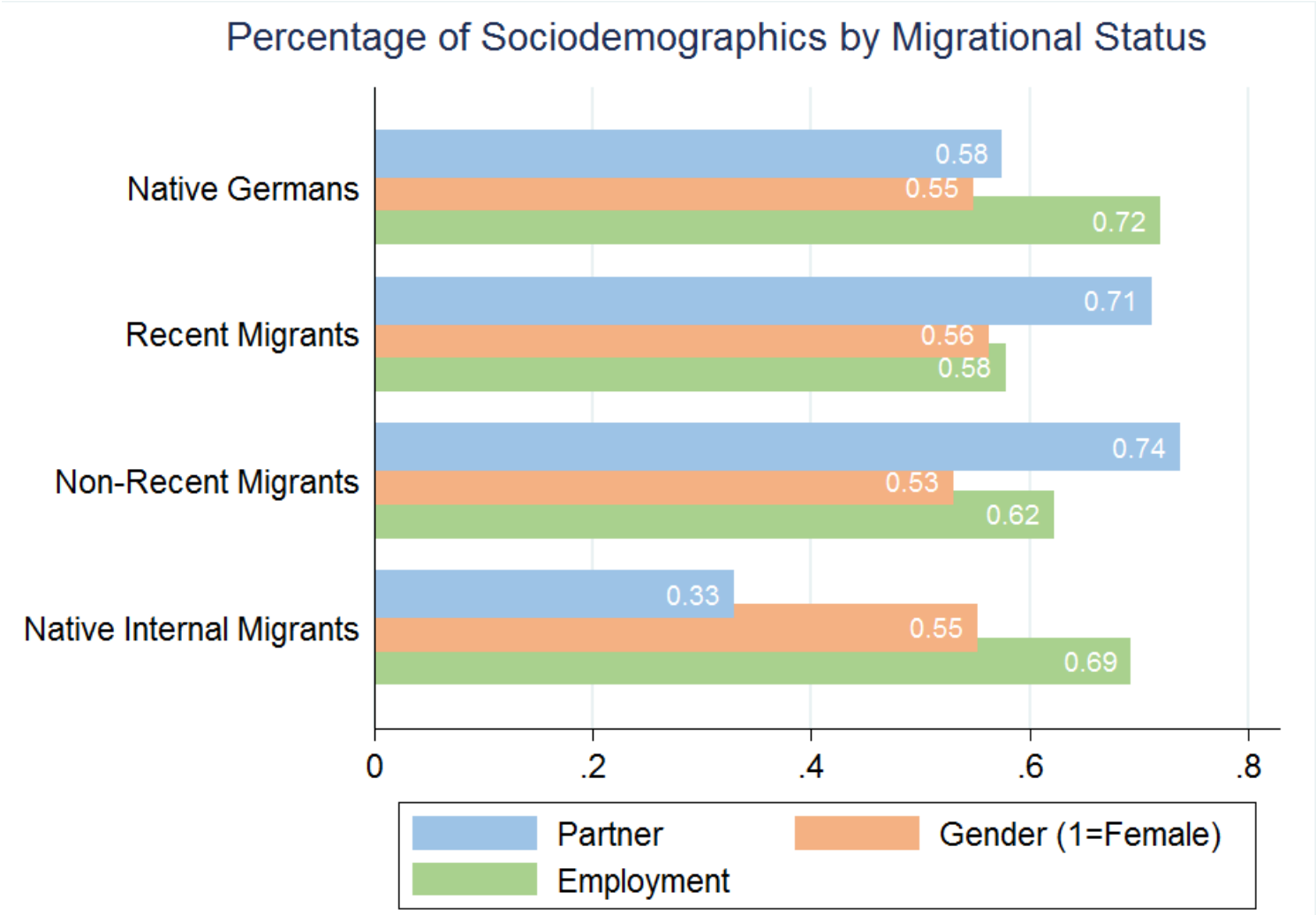
Other Sociodemographics by Migrational Status



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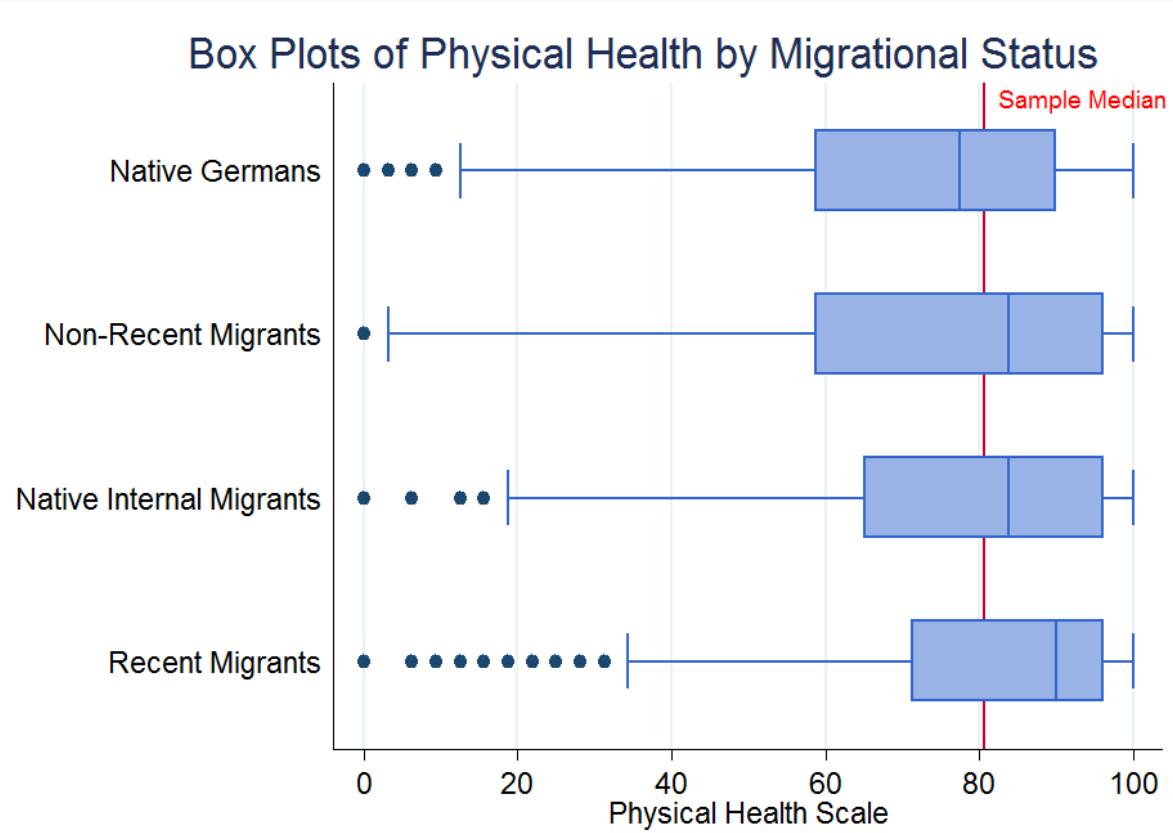
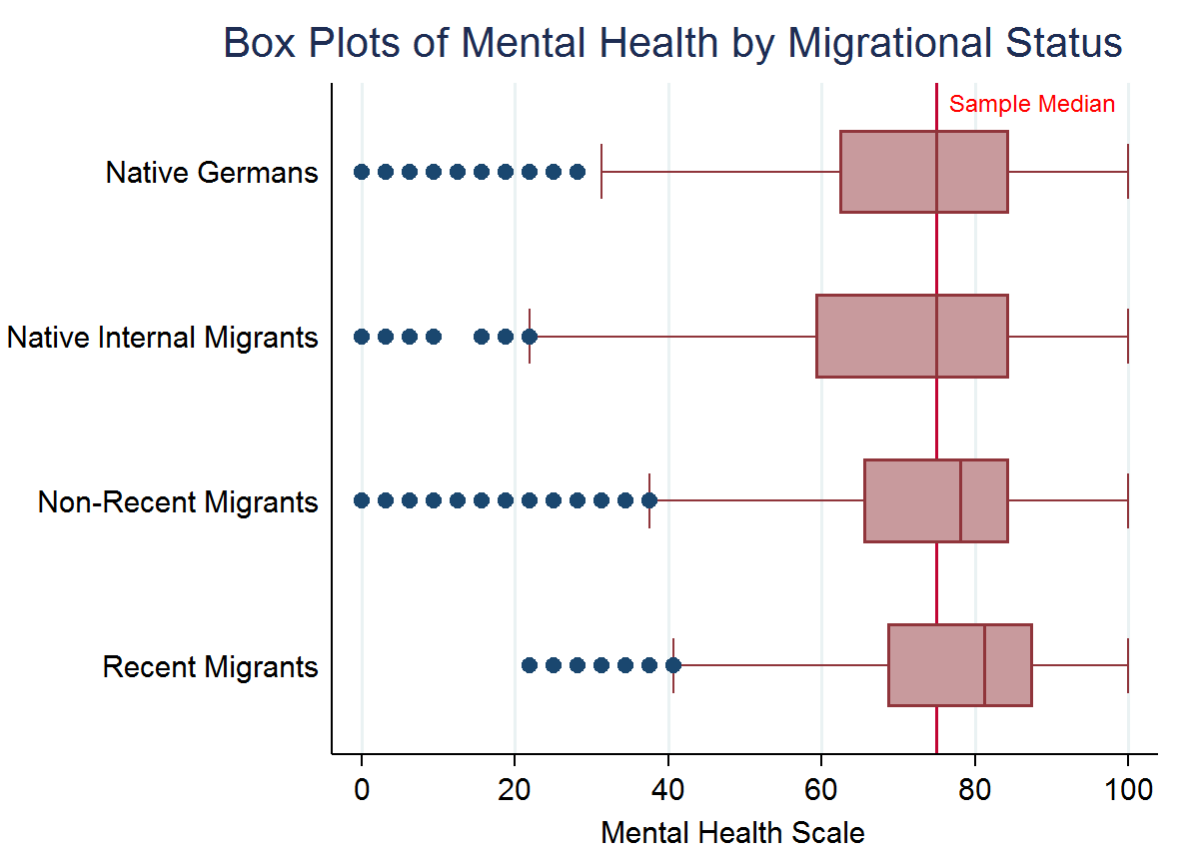
Health scales by Migrational Status

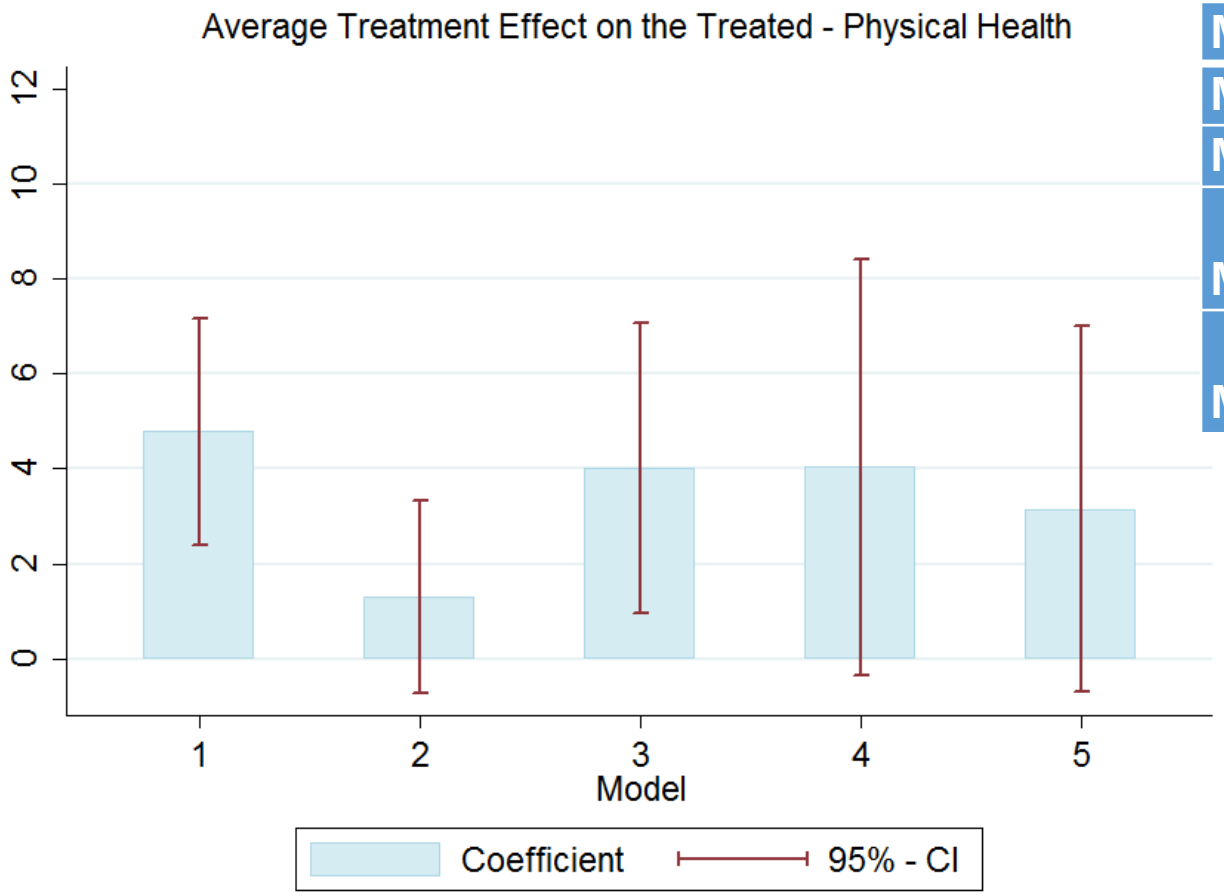




Propensity Score Matching Models

Model 1	**Recent Migrants vs. Native Germans**
Model 2	Non-Recent Migrants vs. Native Germans
Model 3	Recent Migrants vs. Non-Recent Migrants
Model 4	Recent Migrants vs. Native German Internal Migrants
Model 5	Non-Recent Migrants vs. Native German Internal Migrants

Average Treatment Effect on the Treated



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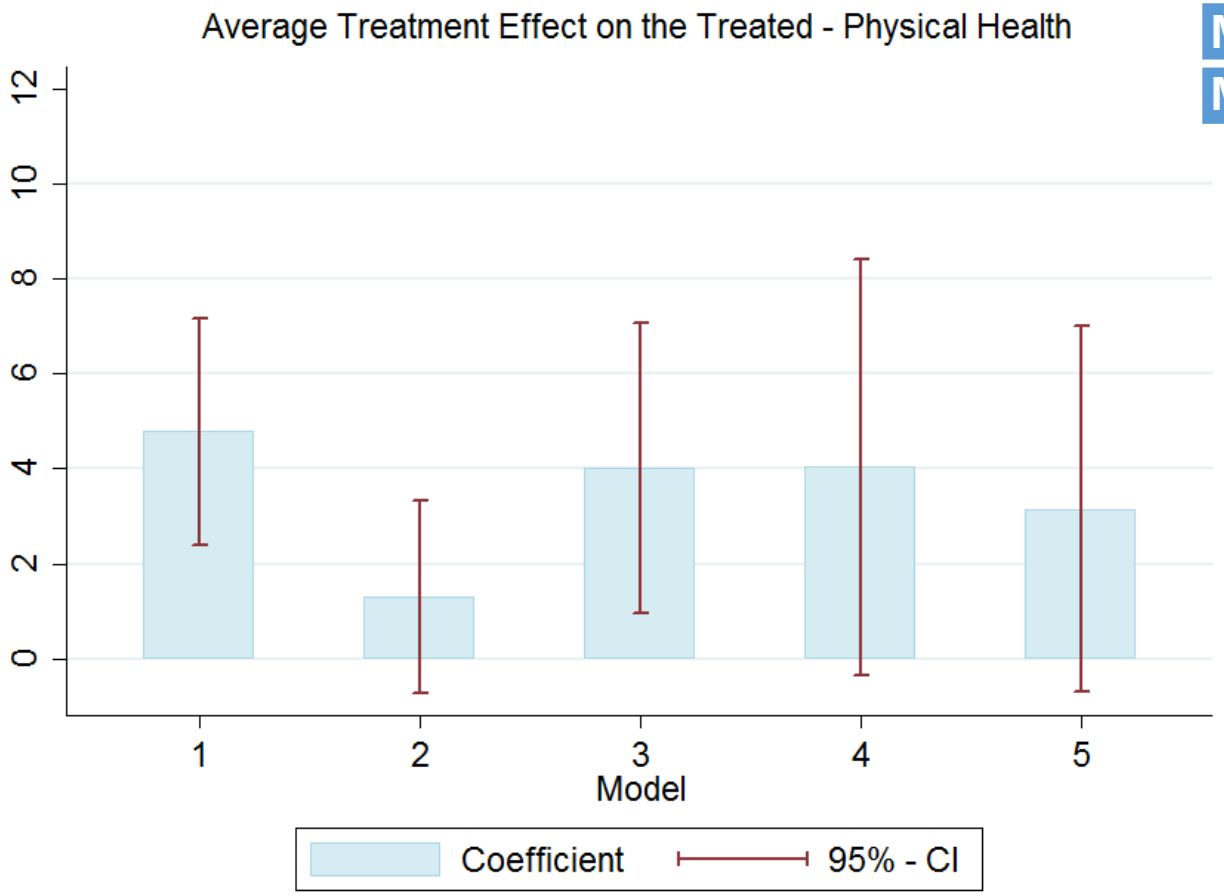

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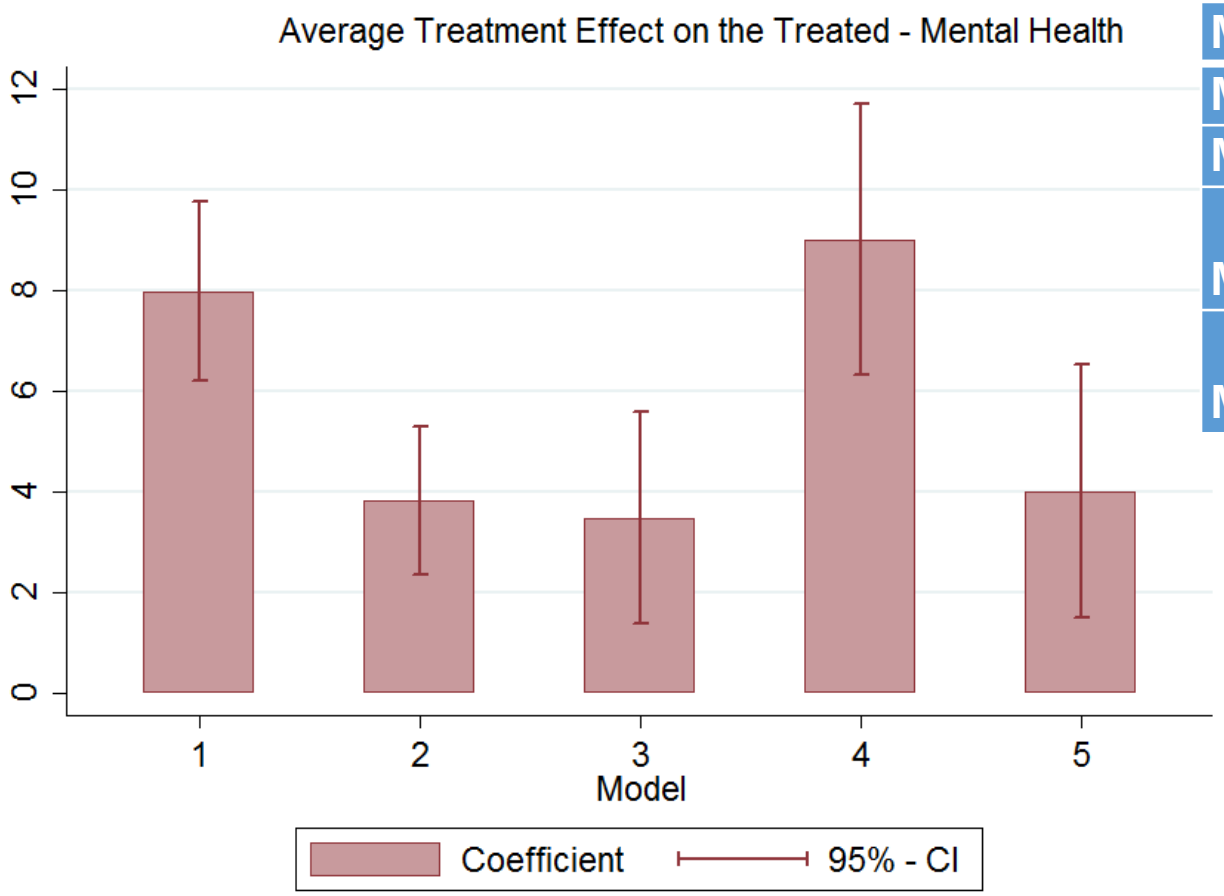

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Conclusions

There is a Healthy Immigrant Effect for Physical Health

Changing the comparison group to native internal migrants yields a dissapearance of the health advantage

There is a Healthy Immigrant Effect for Mental Health

Health advantage stays significant across all comparison groups

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