Feeling Better with Similar Others? The Role of Social Networks on The Development of Ethnic Identities and Mental Health Outcomes

### EXTENDED ABSTRACT

For children of immigrants, the development of ethnic and national identities is an important part of one's self-concept (Rumbaut 1994; Waters, 1994; Portes and Rumbaut, 2001). An extensive body of research suggests that a strong ethnic identity is associated with several aspects of personal wellbeing for ethnic and racial minorities, including self-esteem (e.g., Phinney et al. 1997; Adriana J. Umana-Taylor, 2004), mastery, and optimism (Roberts et al. 1999). Examining the stress-buffering theory, some studies also find that the strength of ethnic identity is associated with fewer depressive symptoms while serving as a protective factor against everyday discrimination (Mossakowaski, 2003; Yip et al. 2008). Implicit in these studies, yet not explicitly measured, is the role of co-ethnic friendships for influencing both identity salience and health outcomes.

People tend to form relationships with similar others (McPherson et al. 2001). This tendency, also known as homophily, has strong implications for the development of attitudes and future social interactions (Granovetter, 1973; McPherson et al. 2001). As suggested by previous work (McPherson et al. 2001), while homophily in social networks might occur for various reasons, ethnic homophily continues to be the "strongest divide" for social and personal relationships. Preference for ethnic homophily shapes school friendships (e.g. Smith et al., 2016), work relationships (Ibarra, 1995), and marriage (Kalmijn 1998). While social network reserach has mainly focused on socio-economic outcomes, ethnic homophily might play an important role for identity development and in turn personal wellbeing, since friends are often considered the primary sources for evaluation and support of one's identity (see Brechwald & Prinstein; Syed & Juan, 2012). Using Baron and Kenny's (1986) method to test for mediation, we expect co-ethnic networks to lead to better mental health outcomes, mediated by a strong ethnic identity:

**H1**. Children of immigrants with many co-ethnic friends will report a stronger ethnic identity compared to those with mixed friends or only native friends.

- **H2**. Children of immigrants with many co-ethnic friends will have better mental health outcomes compared to those with mixed friends or only native friends.
- **H3.** Children of immigrants with a strong ethnic identity will have better mental health outcomes compared to those with a less strong attachment to their ethnic identity.
- **H4.** The effect of the number of co-ethnic friends on mental health will be reduced when controlling for the strength of one's ethnic identity.

### Methods

To test these hypotheses, we use the Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU), which follows adolescents over three years in high school between 2010 and 2013 in Germany, Sweden, The Netherlands, and England. For the exploratory data analysis of this extended abstract, we include all children and grandchildren of immigrants that participated in the first wave and have all non-missing information (N= 4,573), and run a multilevel model for students nested in classrooms with fixed-effects by country.

We include two measures of *mental health*: low self-esteem and depressive symptoms, both created using summated scales (alphas: 0.81 and 0.78). On average, children of immigrants in this sample have a score of 0.84 out of 4 on the self-esteem scale and 1.01 out of 3 on the depression scale. We measure *coethnic network* by matching the respondent's self-selected ethnicity to the self-selected ethnicity of the nominated five best friends in the classroom. On average, children of immigrants in this sample have between one and two co-ethnic best friends out of five. In order to measure *ethnic identity salience*, we compare children of immigrants who feel fairly or very strongly attached to their self-chosen ethnic identity (65.82% of the sample), to those who do not at all or not very strongly feel attached to this group. We *control* for measures that have been found to affect mental health such as gender, age, generational status, parents' education and employment, household composition. We also control for class and school level variables such as class size, class diversity and percent immigrant in school.

 $Table\ 1.\ Multilevel\ Estimates\ for\ Ethnic\ Identity\ and\ Mental\ Health\ Among\ Children\ of\ Immigrants, \\ Random\ Intercepts\ by\ Classroom\ (N=4,573)$ 

|                                      | Strong ethnic identity (logit) | Low self-esteem (linear) |                     |                     | Depression (linear)   |                       |                       |
|--------------------------------------|--------------------------------|--------------------------|---------------------|---------------------|-----------------------|-----------------------|-----------------------|
|                                      | Model 1                        | Model 2                  | Model 3             | Model 4             | Model 5               | Model 6               | Model 7               |
| Proportion of co-ethnic best friends | 0.702***                       | -0.046                   |                     | -0.032              | -0.097***             |                       | -0.087***             |
|                                      | (7.257)                        | (-1.868)                 |                     | (-1.287)            | (-3.749)              |                       | (-3.375)              |
| Strong ethnic identity               |                                |                          | -0.107***           | -0.104***           |                       | -0.075***             | -0.068***             |
|                                      |                                |                          | (-5.588)            | (-5.421)            |                       | (-3.725)              | (-3.349)              |
| Demographics                         |                                |                          |                     |                     |                       |                       |                       |
| Girl                                 | 0.042                          | 0.198***                 | 0.199***            | 0.199***            | 0.335***              | 0.334***              | 0.336***              |
|                                      | (0.623)                        | (10.995)                 | (11.063)            | (11.086)            | (17.703)              | (17.675)              | (17.757)              |
| Age                                  | 0.100                          | -0.004                   | -0.002              | -0.002              | 0.034*                | 0.035*                | 0.035*                |
|                                      | (1.840)                        | (-0.303)                 | (-0.149)            | (-0.167)            | (2.243)               | (2.366)               | (2.329)               |
| Broad generational status (ref=2nd)  |                                |                          |                     |                     |                       |                       |                       |
| 1st generation                       | 0.017                          | -0.032                   | -0.030              | -0.031              | 0.033                 | 0.036                 | 0.034                 |
|                                      | (0.168)                        | (-1.192)                 | (-1.139)            | (-1.169)            | (1.184)               | (1.280)               | (1.200)               |
| 3rd generation                       | -0.992***                      | 0.080**                  | 0.058               | 0.057               | 0.076*                | 0.065*                | 0.061                 |
|                                      | (-8.947)                       | (2.604)                  | (1.884)             | (1.834)             | (2.352)               | (1.995)               | (1.866)               |
| Family background                    |                                |                          |                     |                     |                       |                       |                       |
| One parent with a university         | -0.189*                        | -0.084***                | 0.000***            | -0.088***           | 0.008                 | 0.012                 | 0.006                 |
| degree                               |                                |                          | -0.086***           |                     |                       |                       |                       |
| Dath high sign manner at home        | (-2.516)<br>0.246**            | (-4.114)<br>-0.133***    | (-4.234)            | (-4.332)            | (0.395)               | (0.560)               | (0.266)               |
| Both biological parents at home      |                                |                          | -0.129***           | -0.128***           | -0.124***             | -0.124***             | -0.120***             |
| I I a manufacted becomes held        | (3.001)                        | (-6.027)                 | (-5.867)            | (-5.797)            | (-5.307)              | (-5.330)              | (-5.157)<br>0.024     |
| Unemployed household                 | -0.137                         | 0.015                    | 0.011               | 0.012               | 0.026                 | 0.021                 |                       |
| Class has been and                   | (-1.473)                       | (0.593)                  | (0.437)             | (0.479)             | (0.985)               | (0.796)               | (0.911)               |
| Class background                     | 0.000                          | 0.001                    | 0.001               | -0.001              | 0.001                 | 0.001                 | 0.001                 |
| Size                                 | -0.000                         | -0.001                   | -0.001              |                     |                       |                       |                       |
| D''                                  | (-0.063)                       | (-0.364)                 | (-0.256)            | (-0.370)            | (0.340)               | (0.646)               | (0.338)<br>-0.302**   |
| Diversity                            | 0.258                          | -0.340**                 | -0.290**            | -0.333**            | -0.305**              | -0.181                |                       |
| Calcarl                              | (0.693)                        | (-3.196)                 | (-2.893)            | (-3.151)            | (-2.800)              | (-1.762)              | (-2.771)              |
| School                               | 0 152***                       | 0.000444                 | 0.000***            | 0.002***            | 0.042***              | 0.047***              | 0.040**               |
| Percent immigrant in school          | 0.153***                       | -0.086***                | -0.086***           | -0.083***           | -0.042***             | -0.047***             | -0.040**              |
| Country of Company (not Company)     | (3.595)                        | (-7.108)                 | (-7.206)            | (-6.849)            | (-3.350)              | (-3.873)              | (-3.173)              |
| Country of Survey (ref=Germany)      | 0.054                          | 0.104***                 | 0.104***            | 0.185***            | 0.005                 | 0.002                 | 0.006                 |
| England                              | 0.054                          | 0.184***                 | 0.184***            |                     | 0.005                 | 0.003                 | 0.006                 |
| Natharlands                          | (0.521)<br>0.695***            | (6.097)<br>0.064*        | (6.131)<br>0.078*   | (6.164)<br>0.076*   | (0.174)               | (0.090)<br>-0.260***  | (0.199)<br>-0.264***  |
| Netherlands                          |                                |                          |                     |                     |                       |                       |                       |
| Swadon                               | (5.810)<br>-0.220*             | (2.008)<br>-0.081**      | (2.473)<br>-0.088** | (2.419)<br>-0.087** | (-8.402)<br>-0.341*** | (-8.017)<br>-0.346*** | (-8.133)<br>-0.345*** |
| Sweden                               |                                |                          |                     |                     |                       |                       |                       |
| Constant                             | (-2.099)                       | (-2.694)                 | (-2.916)            | (-2.904)            | (-10.975)             | (-11.165)             | (-11.114)             |
| Constant                             | -1.576                         | 2.296***                 | 2.298***            | 2.318***            | 0.793***              | 0.755**               | 0.808***              |
|                                      | (-1.834)                       | (10.140)                 | (10.207)            | (10.272)            | (3.334)               | (3.182)               | (3.401)               |
|                                      |                                | 1                        |                     |                     | l Iab                 | ole continued         | on next page          |

Table 2. Continued

|                   | Strong ethnic identity (logit) | Low self-esteem (linear) |           |           | Depression (linear) |           |           |
|-------------------|--------------------------------|--------------------------|-----------|-----------|---------------------|-----------|-----------|
|                   | Model 1                        | Model 2                  | Model 3   | Model 4   | Model 5             | Model 6   | Model 7   |
| Variance by Class |                                |                          |           |           |                     |           |           |
| Constant          | 0.112*                         | -2.024***                | -2.039*** | -2.036*** | -2.091***           | -2.111*** | -2.098*** |
|                   | (2.476)                        | (-18.264)                | (-18.086) | (-18.171) | (-16.847)           | (-16.455) | (-16.766) |
| Residuals         |                                | -0.542***                | -0.545*** | -0.545*** | -0.486***           | -0.485*** | -0.487*** |
|                   |                                | (-48.314)                | (-48.550) | (-48.584) | (-43.695)           | (-43.633) | (-43.793) |

# **Preliminary Results**

Both co-ethnic networks and ethnic identity salience lead to better mental health outcomes; however, we do not find strong support for the mediation hypothesis. As shown in Table 1, children of immigrants with many co-ethnic friends tend to have a stronger ethnic identity compared to those with fewer co-ethnic best friends (Model 1). Moreover, children of immigrants with many co-ethnic friends are less depressed than those with fewer co-ethnic friends (Model 5) even though there is no relationship between co-ethnic networks and self-esteem (Model 2). On the other hand, children of immigrants who are fairly or very attached to their ethnic identity have a lower score on the low self-esteem scale (Model 3) and on the depression scale (Model 6) compared to children of immigrants who are not very or not at all attached to their ethnic group. However, ethnic identity does not mediate the relationship between networks and mental health. Indeed, having both measures of co-ethnic networks and ethnic identity salience together in Models 4 and 7 does not significantly change the relationship between either measure and mental health outcomes.

## **Next Analytical Steps**

The analysis presented in this extended abstract is only based on cross-sectional data and therefore cannot disentangle causal relationships. Using structural equations modeling and information from the subsequent waves of the CILS4EU dataset, we will explore further in this paper if having many co-ethnic friends leads to an increase in the strength of ethnic identity salience over time, and if co-ethnic friendships and/or ethnic identity lead to better mental health outcomes for children of immigrants the following year.

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