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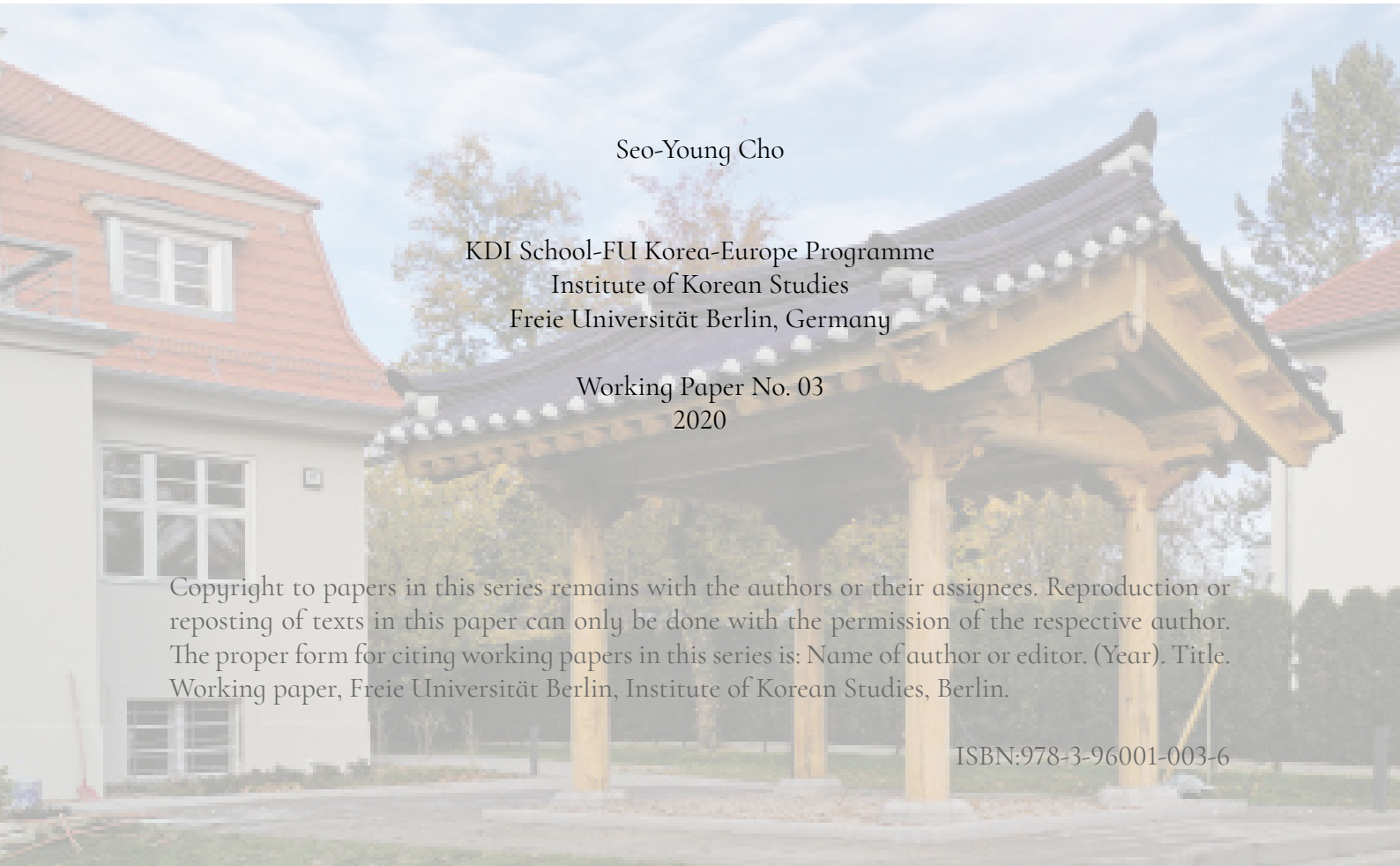
Korea Focus

Being Korean and Living in Korea

– An Experimental Analysis of
North Korean Refugees' Identities and Social Behaviors



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Being Korean and Living in Korea

– An Experimental Analysis of North Korean Refugees' Identities and Social Behaviors

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Abstract:
This paper investigates the effect of shared ethnic identity on social behaviors of marginalized populations by focusing on North Korean refugees in South Korea. The findings of a behavioral experiment conducted with North Korean refugees show that emphasizing the shared Korean identity promotes their integration in South Korea, despite considerable differences caused by seven-decade long separation between the two countries. Exposure to the shared identity with South Koreans increases North Korean refugees' trust, cooperation, confidence, and life satisfaction in South Korea. Furthermore, education and gender (female) are proposed as multiplying factors of strengthening the identity effect.

Keywords:
North Korean Refugees, Identity, Social Trust, Cooperation, Confidence, Life Satisfaction, Integration, Behavioral Experiment

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1. Introduction

North Korean refugees postulate an emerging societal issue in South Korea today. Since the Arduous March in the 1990s, the number of people who fled the country has been increasing, and South Korea currently hosts almost 30,000 North Korean refugees. Their integration in South Korea provides a critical barometer of reconciliation between people who have been separated into the North and the South over decades. Hence, addressing conditions that can enhance North Koreans' integration in South Korea is a timely relevant policy issue.

To this end, this study endeavors to identify social conditions that can reinforce North Korean refugees' social behaviors and preferences for integration. The analysis focuses on identity as a stimulator of social behaviors, following identity theories that emphasize the role of social identity in individual decision-making (Humlum et al. 2012). Accordingly, this paper examines whether emphasizing North Koreans' shared identity with South Koreans – being Korean – can provide a supportive condition for their integration. The shared Korean identity is placed at the center of the analysis because it is arguably the most important identity that led North Korean refugees to choose South Korea to venture on their new life.

Nonetheless, North Korean refugees often struggle to build a positive identity of being Korean because they are indeed distinguishable from South Koreans not only in their socioeconomic status but also in accents, looks, habits, values, and experience (Kim et al. 2017, Haggard and Noland 2010). According to a social survey conducted by the Korea Hana Foundation (2015–2017), North Korean refugees attribute their hardship in South Korea to cultural and language differences. This finding reveals considerable consequences of the seven-decade long confrontational separation between North and South Korea despite their shared roots.

In light of such differences, some argue that North Koreans' integration should be addressed as an agenda of multiculturalism in a similar way to foreigners instead of Korean unity. Others doubt the effectiveness of this approach because emphasizing differences over commonality may exacerbate discrimination against North Koreans and undermine social cohesion. Therefore, their integration is argued to be an issue of building Korean solidarity.

Considering these arguments, this paper investigates the effect of the shared Korean identity through a behavioral experiment with 130 North Korean refugees. In this experiment, participants were grouped into two, in that the former received the treatment of priming the shared Korean identity and for the latter, their North Korean identity was made salient. While the Korean identity underscores ethnic unity and solidarity as Korean, the North Korean identity evokes their memories specific to North Korea and underlines their differences from South Koreans.

To the present, experimental studies of North Korean refugees are rare in the literature. Kim et al. (2017) is the only one using a similar approach, through which effects of priming inter-Korean historical events on North Korean refugees' social preferences towards economic and political institutions were examined (and they found no priming effect). Different from Kim et al., this paper focuses on the identity based on the unity of being Korean and its effect on social behaviors and attitudes relevant for the refugees' daily integration in South Korea.

The experimental findings establish positive relationship between the shared Korean identity and North Koreans' trust, cooperation, confidence, and life satisfaction in South Korea. Exposure to the shared identity also enhances their confidence about North Korean origin to certain extent, suggesting that Korean unity can promote not only North Koreans' integration in the South but also their self-esteem of the North Korean background. The experiment further shows education and gender (female) as multiplying factors that can strengthen the effect of the Korean identity. This finding entails the importance of incorporating education and gender-specific policies to accelerate North Koreans' social integration.

2. Research Method

2.1. Behavioral Experiment

The central focus of this experiment is to identify the effect of the shared Korean identity on North Korean refugees' social behaviors and attitudes. To do so, the experiment applied a priming method proposed by Shih et al. (1999), in which participants were exposure to a certain identity in an experimental setting and their behavioral choices were observed thereafter. In Shih et al.'s study, Asian American girls were primed either their female or Asian identity, and the effect of each identity was gauged with respect to their math performance. This approach utilized the widely accepted belief that Asians are good at math, while women are not. This method has an advantage of randomizing the treatment (identity priming) and estimating the direct relationship between identities and behavioral outcomes under controlled environments.

Following this approach, experiment participants were grouped into two and primed a different identity: either the shared identity of being Korean or the North Korean identity. These two identities represent social environments of North Koreans in South Korea. On the one hand, North Koreans are legally and commonly recognized as Koreans sharing the identity with South Koreans. On the other hand, they exhibit considerable differences from South Koreans in many aspects (culturally, behaviorally, linguistically, etc.), as a result of the long confrontational separation. Moreover, their status in South Korea is regarded as a social minority who are indeed refugees. Thus, their identity reflecting North Korean characteristics is often perceived as inferior to and different from South Koreans. Making use of these different social references, each participant was primed one of the two identities by answering questions that appealed to her/his assigned identity – with the assumption that the participant would be under the influences of the designated identity during the experiment.

Specifically, the group who were primed the shared Korean identity received the following three questions on experience and traits common to both North and South Koreans that were used to stress the ethnic and cultural unity of being Korean.

Questions of Shared Korean Identity-Priming:

(i) When did you feel proud of being Korean?

(ii) In your opinion, what are the three most representative dishes of the Korean cuisine?

(iii) If you have a chance to introduce the Korean culture to a foreigner, what would you show first?

For those primed the North Korean identity, another three questions were asked to make their North Korean identity salient by appealing to their memories specific to North Korea.

Questions of North Korean Identity-Priming:

(i) What is the most prominent memory from your life back in North Korea?

(ii) In your opinion, which common strengths do North Koreans share, compared to South Koreans?

(iii) Between the Kumgangsan and Paektusan – the two most well-known mountains in North Korea – which one do you like more?

Note that the assignment of the identity-priming was randomized by a blind test method (without seeing the content, participants picked up questionnaires that were randomly mixed) in order to ensure no systematic difference in the characteristics of the two groups that may otherwise influence individual behavioral choices.

After primed one of the two identities, participants were given scenarios that described situations related to trusting and cooperating with others, self-confidence, and life satisfaction, and then asked to decide how to respond to the given circumstances. The questions consisted of two parts. The first included 14 main- and 25 sub-questions on behavioral choices of trust and cooperation with North and South Koreans, respectively, as well as their confidence about decision-making and North Korean origin. In the second part, 28 main- and 40 sub-questions were asked, including questions on demographic characteristics and experience involving their fleeing the North and life in the South.

2.2. Participant Recruitment

Recruiting North Korean refugees for the experiment was not an easy task because of their marginalized status as refugees and their fear of disclosing personal information. To overcome this challenge, we contacted social organizations that aided North Korean refugees and therefore gained their trust and the extensive networks of these organizations were used to secure participants through a chain-referral method. These organizations included protestant churches, local social welfare centers, university student groups, and civil rights NGOs that provided support and advocacy for North Korean refugees in the Seoul Capital Area (SCA, Seoul and the Gyeonggi Province).

The information gathered through the experiment was treated as strictly confidential by maintaining anonymity and coding under randomly assigned ID numbers to prevent any personalized identity from being disclosed.

Using the North Korean networks, 130 adults (over age 19) were recruited and the experiment was conducted in spring 2019. In this process, we tried to include diverse groups of individuals who represented the main characteristics of the theoretical population of North Korean refugees in South Korea, especially in terms of age, gender, current residential areas, and the length of living in South Korea. These four factors are commonly used as key variables to stratify the North Korean refugee population (Korea Hana Foundation 2011–2017). The sample and population characteristics are compared in Section 2.3.

2.3. Representation of the Sample

Currently, almost 30,000 North Korean refugees reside in South Korea. A crucial question on the empirical validity of this study involves whether the participants of the experiment can represent the entire population of North Korean refugees in South Korea. Refugees are considered a 'hidden population' (Spreen 1992) who are marginalized in society and therefore hard to reach for research purposes. Hence, recruiting participants relied on existing networks by using chain-referrals. Given that, it is necessary to verify how well the sampled group resembles the population characteristics. Accordingly, the sample characteristics were compared with the North Korean refugee population's in South Korea by using information provided by the Government of the Republic of Korea (2017).

To do so, the aforementioned four essential categories of North Korean refugees' characteristics were used following the most generalized survey of North Korean refugees conducted by the Korea Hana Foundation. Table 1 summarizes the results of the comparison, showing that the sample resembles the entire population of North Korean refugees to a large extent in terms of their gender composition, age structures, and years of living in South Korea. The sample represents slightly more women, people in their 20s and 50s, and newcomers – living in South Korea for less than three years – than the population. However, the overall distributions of these demographic traits capture the population characteristics fairly well. However, the distribution of current residential areas differs considerably between the sample and the population. Most sampled individuals were residents of the Seoul Capital Area where the experiment was implemented, while SCA residents form less than two-thirds of the North Korean refugee population in South Korea. This difference necessitates caution in applying the findings of this study nationwide.

3. Descriptive Analysis

This section discusses differences in North Korean refugees' behavioral and attitudinal preferences between the two identity groups in a descriptive manner, followed by a regression analysis of estimating the identity effect in Section 4.

3.1. Social Trust

In this experiment, participants revealed their trust in North and South Koreans by deciding whether they would lend money to a North (South) Korean acquaintance who was not personally close to them. The results presented in Tables 2.1. and 2.2 show that a significantly higher share of participants was willing to lend money without conditionality to other North Koreans (NK) than to South Koreans (SK): 27.13 vs. 8.46 percent. In contrast, North Koreans imposed conditionality of signing a document of obligation to SK more than to NK: 24.62 vs. 12.40 percent. The refusal rate was also higher for SK than for NK: 66.92 vs. 60.47 percent.

When the outcomes are compared between the two identity groups, the results show significant differences. Participants in the shared Korean identity group (K-identity) chose to lend money (with or without conditionality) to South Koreans (36.07 percent) as often as to North Koreans (35 percent). By contrast, participants under the North Korean identity-priming (NK-identity) demonstrated a significantly higher level of willingness to lend money to other North Koreans than to South Koreans: 43.48 vs. 30.44 percent.

The varied behavioral patterns between the K- and NK-identity groups are further corroborated when differences in lending decisions for North and South Koreans are examined: namely, lending-decision for SK *minus* lending-decision for NK. This approach enables the computation of net differences in lending to NK and SK that exclude baseline individual preferences for lending per se, which are influenced by personal characteristics.[1] In Table 2.3, the net differences are compared between the two identity groups. The majority in both groups decided identical lending options for their North and South Korean colleagues, but the share of the identical decisions is slightly higher in the K-identity group than the NK-identity one: 63.33 vs. 59.42 percent. In addition, in the K-identity group, the share of those who expressed preferences for lending to North Koreans (20 percent) is similar to the share of others who preferred South Koreans (16.67 percent). On the contrary, considerably more participants in the NK-identity group preferred lending money to North Koreans (30.43 percent) than to South Koreans (10.15 percent).

In addition to the lending decisions, participants were asked another mode of a question on trust, in which they rated the level of their relative trust between North and South Korean societies. This question was formed to evaluate the refugees' attitudes towards trust in a more abstract way (than the specific circumstances used to reveal one's lending choices). The distribution of rating on a 10-point scale is presented in Table 2.4, with a lower score representing a higher level of trust in SK over NK.[2] Generally, participants demonstrated a slightly higher level of trust in NK with a mean score of 5.34. However, examining it by identity group shows a significant difference. The K-identity group expressed a higher level of trust in South Korea (mean = 4.71), while the NK-identity group evaluated North Korea more positively (mean = 5.86).

1 By doing so, potential biases that arise from correlation between individual traits and decisions to participate in the experiment (for instance, more trusting people tend to participate in the experiment) can be minimized.

2 A score of 1 indicates that one can trust others in South Korea completely more than in North Korea – vice versa for a score of 10. Accordingly, a score of 5 represents the equal level of trust in both.

3.2. Cooperation

To assess one's attitudes towards cooperation, participants were asked to determine in which society – either North or South Korea – one could cooperate with others better. They rated the comparative level of cooperation on a 10-point scale, with a smaller score indicating a higher level of cooperation in the South (the same procedure as the evaluation of trust level above). This question captures the relative degree of one's willingness to form collaboration in South Korea as an indicator of integration.

On average, North Korean refugees perceived North Korea more positively than South Korea regarding cooperating with others – with a mean score of 5.37 (Table 2.5). This finding is comparable to the trust level above, for which they also rated North Korea slightly above South Korea. One may be surprised with such preferences expressed by the refugees given the political unrest and institutional weakness of North Korea. However, these responses should be understood as personal perceptions, considering that North Korean refugees often face discrimination and exclusion in South Korea and thus are discouraged from trusting and cooperating with others in their adopted country.[3]

The results further show that North Koreans' reluctance to cooperate in South Korea can be mitigated by evoking the shared Korean identity. Comparing the outcomes of the two groups, participants in the K-identity group placed South Korea above the North in pursuing cooperation (mean = 4.81). In contrast, the NK-identity group evaluated North Korea more positively with a mean score of 5.81. Also, 46.56 percent of the K-identity group responded that it was easier to cooperate with others in South Korea, but only 28.36 percent of the NK-identity group answered this way.

3.3. Confidence and Life Satisfaction

The positive outcome of priming the shared Korean identity is also found in confidence. Participants were asked to recall three important decisions they made after arriving in South Korea. Then, they evaluated how much they were satisfied with their decisions with the following four choices: (i) *I am generally satisfied with my decisions*, (ii) *I think my decisions are often second-best because there is no better alternative*, (iii) *I generally regret my decisions because there is usually an alternative*, and (iv) *I generally regret my decisions but there is no alternative*. Overall, a considerably high share of people expressed satisfaction with their decision-making by choosing (i) (76.74 percent, Table 3.1). Furthermore, the share of the positive response is greater in the K-identity group (81.67 percent) than the NK-identity one (72.46 percent).

Participants' confidence was further assessed by asking about intention to hide own's North Korean origin. The share of those who intended to conceal their origin is substantial: intention to hide = 50 percent vs. no intention to hide = 50 percent (Table 3.2). However, when the shared K-identity was primed, the majority (52.54 percent) answered '*no intention to hide*'. In contrast, 52.17 percent in the NK-identity group admitted their intention not to disclose it. This result is interesting because exposure to the K-identity can increase one's confidence about his/her NK origin. This finding offers an implication that social unity can be instrumental to stimulate tolerance and acceptance of diversity by forming solidarity among people of different backgrounds.

3 In this experiment, related questions were asked regarding their experience of discrimination in South Korea. The majority answered that prejudice and cultural and institutional differences were the main causes of their hardship in South Korea.

Lastly, participants rated their life satisfaction in South Korea[4] on a scale from 1 (totally unsatisfied) to 10 (totally satisfied). While the level of satisfaction is relatively high in general (mean = 7.49), it is even higher for the K-identity group than the NK-identity one: mean = 7.83 vs. 7.20 (Table 3.3)

4. Regression Analysis

The descriptive findings present that North Koreans refugees primed the shared Korean identity expressed higher levels of trust, cooperation, confidence, and life satisfaction in South Korea than others under the North Korean identity. In this section, these findings were further examined through regression analyses controlling for other covariates that influenced social behaviors and attitudes.

4.1. Empirical Model

The central focus of the regression analysis is to estimate the effect of the identity. Accordingly, a multiple regression model was formulated below.

$$y_i = a + ßidentity_i + X_i'W + G_i'Z + R_i'K + u_i$$
$$(i = 1,,,,,,130, \text{individual})$$

The set of the dependent variables includes: Y = {trust, cooperation, confidence, life satisfaction}. Trust was measured by two variables: (i) net difference in trusting SK and NK individuals (constructed based on Table 2.3) and (ii) the comparative level of trusting SK and NK societies (Table 2.4). The first variable was designed to reflect the level of one's relative trust in South Koreans over North Koreans. This variable has an ordinal structure of a three-point scale, in that *lending to North Koreans more willingly* receives a score of 1, *the same choice for both* 2, and *lending to South Koreans more willingly* 3. The second variable captures the level of trusting South Korean society relative to the North Korean one, measured on a scale of 1 (full trust in SK) to 10 (full trust in NK) in the questionnaire. In this model, this scale was inverted – i.e. 10 indicating full trust in South Korea – in order to harmonize the scale with the other dependent variables, in which a higher score refers to more favorable evaluation for South Korea.

The cooperation variable was formed in the same manner as the second trust variable. Participants rated the level of their willingness to cooperate in South Korea relative to their willingness in North Korea on a 10-point scale (again, the scale was inverted here). Life satisfaction was also measured on a 10-point scale with a score of 10 representing full life satisfaction in South Korea and 0 full dissatisfaction.

For confidence, two measurements were used: (i) confidence about one's decision-making in South Korea (constructed based on Table 3.1) and (ii) confidence about one's NK origin (Table 3.2). Confidence about decision-making was revealed by selecting one of the four answers described in Section 3.3 and each answer was quantified on a four-point scale, in that a higher score corresponds with a higher level of confidence. The second measurement of confidence was coded as a dummy variable. If one answered '*I don't have intention to hide my NK origin*, he/she received a score of 1, and otherwise, 0 (with intention of hiding it).

4 The number of answers on life satisfaction is 113 that is about 10% smaller than answers on the other questions. Given the missing observations, one may be concerned about selection biases caused by intentional avoidance of answer by certain groups of people. However, the distribution of the answers for this question between the two identity groups exhibits a similar pattern to those of the other questions, assuring that a selection bias is not a major concern here.

The explanatory variable of main interest is *identity* that designates the identity primed in the experiment. It has a dummy structure with a value of 1 indicating the shared Korean identity and 0 the North Korean identity. Note that the identities were randomly assigned among participants and thus the identity primed to each participant was independent of any individual or group characteristics. The randomization of identity-priming enabled the estimation of the causal effect of the identity.

X is a vector of other explanatory variables. This set encompasses individual characteristics that determine behaviors and attitudes: age, gender (female), marital status, years after leaving North Korea, years of living in South Korea, education, and economic status. *Age* variable includes its squared term to account for its potentially non-linear effect. *Education* was measured on a five-point scale: 5 (college or above), 4 (high school), 3 (middle school), 2 (elementary school), and 1 (no education). *Economic status* reflects the self-evaluated level of one's economic conditions measured on a six-point scale: 6 (very high level), 5 (high), 4 (middle-high), 3 (middle-low), 2 (low), and 1 (very low). *Marital status* is a dummy variable, indicating married (1) or not (0).

G comprises dummy variables of grouping people who participated in the experiment together. The experiment was conducted with eight different groups from churches, universities, and social and community organizations, and therefore, each group had its own dynamics and characteristics. With the group fixed effects, group heterogeneity, which likely affected individual preferences, was controlled for. R is a set of regional dummy variables capturing hometown characteristics in North Korea. The error term (u_i) represents unobserved characteristics clustered at the individual level.

The model was estimated by applying methods appropriate to the structures of the dependent variables. For the net difference in trusting SK and NK and confidence about decision-making, an ordered probit method was employed given their ordinal structures. When the dependent variable had a 10-point scale, a negative binomial regression technique was used. Additionally, the model of confidence about the NK origin was estimated by a probit method, accounting for its dummy structure. In Tables 4–7, average marginal effects (the average of predicted change in fitted values for one-unit change in an explanatory variable for each observation) were reported.

4.2. Findings

The model of the identity effect was estimated by controlling for three different combinations of individual and group heterogeneity. First, the aggregate effect of priming the K-identity was estimated without any control variables. Afterwards, individual and group characteristics (X and G) were added in the model and then, regional variables (R). As seen in Tables 4 and 5, the effect of the identity is similar in its magnitude and significance across the different models. This supports the random distribution of identity-priming, independent of participants' characteristics.

Overall, priming the shared Korean identity has a positive effect on trust and cooperation in South Korea (Table 4). Trust in South Koreans (lending-decision) expressed by the K-identity group is 5 percentage point (p.p.) higher than that of others under the NK-identity (Columns 1–3). Also, by priming the K-identity, participants evaluated the relative levels of their trust and cooperation in South Korea more favorably – 12 p.p. and 8 p.p. higher than the NK-identity group (Columns 4–6 and 7–9, respectively).

The positive role of the Korean identity is further evident in confidence and life satisfaction in South Korea (Table 5). The level of confidence about decision-making is 4.5–4.8 p.p. higher for the K-identity group than the NK-identity one (Columns 1–3). Also, the K-identity has a sizable effect on life satisfaction, increasing it by 6 p.p. (Columns 7–9).

However, when it concerns self-confidence about North Korean origin, the results appear more complex (Columns 4–6, Table 5). The probability of answering, *no indention to hide*, is 3.5–5 p.p. higher for the K-identity group. However, the effect is significant at a 10 percent level only and its magnitude is smaller than the effects on the other social behaviors. This is probably because self-confidence is a more personally rooted attitude, and thus, social environments – such as exposure to Korean unity – may have a limited role in stimulating it.

Among individual heterogeneity, a significant gender effect is found that female refugees have higher levels of trust, cooperation, and life satisfaction in South Korea, as well as self-confidence about their North Korean origin. This finding suggests that female refugees be more readily integrated in South Korea than their male counterparts, while maintaining confidence about their origin. Also, higher education and longer living in South Korea strengthen North Koreans' trust, cooperation, and confidence in the South. However, the effects of economic status and years after leaving North Korea are generally trivial, possibly because of high multi-collinearity sharing similarities with education and the length of living in South Korea. Also, age and marital status have no effect.

5. Further Discussion and Conclusion: K-identity, Education, and Gender

The results above suggest the shared Korean identity as a stimulator of North Korean refugees' social integration. In this section, we further discuss the role of the shared identity by unraveling conditions under which the positive effect of the identity can be reinforced. To do so, education, gender, and the length of living in South Korea were examined as potential conditions that could create compounding effects with the identity on social behaviors. These variables were proposed because they were significant determinants of North Koreans' social behaviors as presented above. Accordingly, the model in Section 4.1 was modified by incorporating the interaction terms between the K-identity and each of the three suggested variables. If these variables generated compounding effects with the K-identity, the respective coefficient of the interaction term should turn positive: i.e. $ß_5 > 0$, $ß_6 > 0$, $ß_7 > 0$ in the model below.

$$y_i = a + ß_1 \text{identity}_i + ß_2 \text{female}_i + ß_3 \text{years of living in SK}_i + ß_4 \text{education}_i + ß_5 \text{identity}_i * \text{female}_i + ß_6 \text{identity}_i * \text{years of living in SK}_i + + ß_7 \text{identity}_i * \text{education}_i + X'_i W + G_i' Z + R_i' K + u_i$$

The results of the hypothesized interaction effects are presented in Tables 6 and 7. First, the interaction effect based on gender is generally positive. On trust (lending-decision), the positive effect of the K-identity is 3 p.p. larger for women than their male counterparts who were also primed the same identity (Column 1, Table 6).

The gender-based identity effect is even greater for cooperation and life satisfaction in South Korea: 5.5 p.p. and 7.9 p.p., respectively (Column 7, Table 6 and Column 7, Table 7). However, gender generates no compounding effect with the K-identity on women's confidence possibly because confidence is a different type of social attitudes that is more internally determined than via external environments (e.g. exposure to unity). Otherwise, the generally positive gender effect for women indicates that male refugees may find it harder to adapt themselves to new life in South Korea, and therefore it is important to adopt gender-specific approaches of integrating male and female refugees.

Second, the effects of the shared Korean identity are larger for the better-educated. College graduates in the K-identity group have higher levels of trust, cooperation, and confidence (decision-making) in South Korea than other college graduates under the NK-identity by 20.7, 15.4, and 6.8 p.p., respectively (Columns 6 and 9, Table 6 and Column 3, Table 7). The positive effects reduce to 12.9, 9.1, and 4.8 p.p. for elementary-school graduates and to 10.4, 7.0, and 4.1 p.p. for those without education. The twofold effects of the K-identity provided by higher education support education as a viable instrument to integrate North Korean refugees in South Korean society. On the other hand, the length of living in South Korea has no multiplying effect, indicating the limited role of duration in integration.

From the interaction effects found here, it is inferred that emphasizing Korean unity can be an effective way of integrating North Korean refugees especially when efforts to improve their education and accommodate gender-specific assistance are combined. These findings hint at focuses of integration policies that should be prioritized. Meanwhile, one should note that the identity effect highlighted in this paper was designed as a priming effect and therefore short-lived in the controlled setting of experiment. Whether reinforcing the shared identity can have long-lasting effects on observable improvement in North Korean refugees' social integration thereby remains as an issue of future studies that exploit real-life situations possibly through a field experiment with a larger number of participants.

References

Cho, Young-Ah. 2015. The Processes of the Discrimination Experience of North Korean Female Defectors in South Korea. *Women's Studies* 89: 37–82 (written in Korean).

Government of the Republic of Korea. 2017. Statistics on North Korean Settlers. Ministry of Unification. www.unikorea.go.kr/unikorea/business/statistics/

Haggard, Stephan and Marcus Noland. 2010. Political Attitudes under Repression: Evidence from North Korean Refugees. East-West Center Working Papers: Politics, Governance, Security Series No. 21.

Humlum, Maria, Kristin Kleinjans, and Helena Nielsen. 2012. An Economic Analysis of Identity and Career Choice. *Economic Inquiry* 50: 39–61.

Kim, Byung-Yeon, Syngjoo Choi, Jungmin Lee, Sokbae Lee. 2017. Do Institutions Affect Social preferences: Evidence from Divided Korea. *Journal of Comparative Economics* 45: 865-888.

Korea Hana Foundation. 2011–2017. *Settlement Survey of North Korean Refugees in South Korea*. Seoul.

Korea Hana Foundation. 2015–2017. *Social Survey of the Integration of North Korean Refugees in South Korea*. Seoul.

Shih, Margaret, Todd L. Pittinsky, and Nalin Ambady. 1999. Stereotype Susceptibility: Identity Salience and Shifts in Quantitative Performance. *Psychological Science* 10: 80–83.

Spreen, Marinus. 1992. Rare Populations, Hidden Populations, and Link-Tracing Designs: What and Why? *Bulletin of Sociological Methodology* 36: 34-54.

Table 1
Demographic Characteristics of North Korean Refugees
– Sample and Population

	Gender	Age	Years of Living in South Korea	Current Residential Area
Sample of this Study (2019) n = 130	F: 80.77% M: 19.23%	15–19: 2.44% 20s: 24.39% 30s: 20.32% 40s: 26.02% 50s: 21.95% 60s+: 4.88%	under 3: 17.6% 3–5: 10.4% 5–10: 44.4% 10+: 25.6%	Seoul Capital 96%
NK Refugee Population in SK (2017) n = 26,430	F: 74.9% M: 25.1%	15–19: 2.4% 20s: 17.9% 30s: 25.6% 40s: 31.4% 50s: 13.8% 60s+: 8.9%	under 3: 12.4% 3–5: 10.6% 5–10: 48.2% 10+: 28.8%	Seoul Capital 63.3%

Table 2
North Korean Refugees, Social Trust, and Cooperation
– Shared Korean and North Korean Identities

Table 2.1. Lending money to North Koreans

	Total Number (%)	K-Identity Group	NK-Identity Group
Willingly lending	35 (27.13%)	16 (26.67%)	19 (27.54%)
Conditional lending with a document of obligation	16 (12.40%)	5 (8.33%)	11 (15.94%)
Cordially refuse	61 (47.29%)	32 (53.33%)	29 (42.03%)
Refuse and keep distance	17 (13.18%)	7 (11.67%)	10 (14.49%)
Total number of answers	129	60	69

Table 2.2. Lending money to South Koreans

	Total Number (%)	K-Identity Group	NK-Identity Group
Willingly lending	11 (8.46%)	7 (11.48%)	4 (5.80%)
Conditional lending with a document of obligation	32 (24.62%)	15 (24.59%)	17 (24.64%)
Cordially refuse	69 (53.08%)	32 (52.45%)	37 (53.62%)
Refuse and keep distance	18 (13.84%)	7 (11.48%)	11 (15.94%)
Total number of answers	130	61	69

Table 2.3. Difference in the choice of lending money to North and South Koreans

	Total Number (%)	K-Identity Group	NK-Identity Group
Lending to North Koreans more willingly	33 (25.58%)	12 (20%)	21 (30.43 %)
Same choice	79 (61.24%)	38 (63.33%)	41 (59.42%)
Lending to South Koreans more willingly	17 (13.18%)	10 (16.67%)	7 (10.15%)
Total number of answers	129	60	69

Table 2.4. In which society can one trust others more?
(a smaller score represents a higher level of trust in SK than NK).

	Total Number (%)	K-Identity Group	NK-Identity Group
Score 1 (South Korea)	20 (16.53%)	12 (21.82%)	8 (12.12%)
Score 2	3 (2.48%)	2 (3.64%)	1 (1.52%)
Score 3	7 (5.79%)	3 (5.46%)	4 (6.06%)
Score 4	14 (11.57%)	9 (16.36%)	5 (7.58%)
Score 5	18 (14.88%)	8 (14.55%)	10 (15.15%)
Score 6	19 (15.70%)	7 (12.73%)	12 (18.18%)
Score 7	12 (9.92%)	5 (9.09%)	7 (10.61%)
Score 8	9 (7.44%)	3 (5.45%)	6 (9.09%)
Score 9	7 (5.79%)	3 (5.45%)	4 (6.06%)
Score 10 (North Korea)	12 (9.9%)	3 (5.45%)	9 (13.63%)
Mean (standard errors)	**5.34 (0.25)**	**4.71 (0.37)**	**5.86 (0.34)**
Total number of answers	121	55	66

Table 2.5. In which society can one cooperate with others more?
(a smaller score represents a higher level of cooperation in SK than NK).

	Total Number (%)	K-Identity Group	NK-Identity Group
Score 1 (South Korea)	24 (19.20%)	16 (27.59%)	8 (11.94%)
Score 2	3 (2.40%)	2 (3.45%)	1 (1.49%)
Score 3	6 (4.80%)	1 (1.72%)	5 (7.46%)
Score 4	13 (10.40%)	8 (13.79%)	5 (7.46%)
Score 5	23 (18.40%)	10 (17.24%)	13 (19.40%)
Score 6	11 (8.80%)	5 (18.62%)	6 (8.96%)
Score 7	11 (8.80%)	1 (1.72%)	10 (14.93%)
Score 8	5 (4.00%)	3 (5.17%)	2 (2.99%)
Score 9	17 (13.60%)	7 (12.07%)	10 (14.93%)
Score 10 (North Korea)	12 (9.60%)	5 (8.63%)	7 (10.45%)
Mean (standard errors)	**5.37 (0.27)**	**4.81 (0.41)**	**5.81 (0.34)**
Total number of answers	125	58	67

Table 3
North Korean Refugees, Confidence, and Life Satisfaction
– Shared Korean and North Korean Identities

Table 3.1. Think about three important decisions you made after arriving in South Korea. Then, choose one of the following statements that best describe yourself who currently live in South Korea.

	Total Number (%)	K-Identity Group	NK-Identity Group
I am generally satisfied with my decisions.	99 (76.74%)	49 (81.67%)	50 (72.46%)
I think my decisions are often second-best because there is no better alternative.	19 (14.73%)	8 (13.33%)	11 (15.94%)
I generally regret my decisions because there is usually an alternative.	7 (5.43%)	2 (3.33%)	5 (7.25%)
I generally regret my decisions but there is no alternative.	4 (3.10%)	1 (1.67%)	3 (4.35%)
Total number of answers	129	60	69

Table 3.2. Do you have an intention to hide your North Korean origin?

	Total Number (%)	K-Identity Group	NK-Identity Group
Intention to hide	64 (50%)	28 (47.46%)	36 (52.17%)
No intention to hide	64 (50%)	31 (52.54%)	33 (47.83%)
Total number of answers	128	59	69

Table 3.3. Are you satisfied with your current life in South Korea?

	Total Number (%)	K-Identity Group	NK-Identity Group
Score 1 (unsatisfied)	1 (0.88%)	0 (0%)	1 (1.64%)
Score 2	1 (0.88%)	0 (0%)	1 (1.64%)
Score 3	3 (2.65%)	1 (1.92%)	2 (3.28%)
Score 4	1 (0.88%)	0 (0%)	1 (1.64%)
Score 5	20 (17.70%)	10 (19.23%)	10 (16.39%)
Score 6	8 (7.08%)	3 (5.77%)	5 (8.20%)
Score 7	17 (15.04%)	6 (11.54%)	11 (18.03%)
Score 8	25 (22.12%)	11 (21.15%)	14 (22.95%)
Score 9	6 (5.31%)	4 (7.69%)	2 (3.28%)
Score 10 (fully satisfied)	31 (27.43%)	17 (32.69%)	14 (22.95%)
Mean (standard errors)	**7.49 (0.20)**	**7.83 (0.28)**	**7.20 (0.28)**
Total number of answers	113	52	61

Table 4
The Effect of the K-Identity on North Korean Refugees' Social Trust and Cooperation in South Korea

	Difference in Lending to SK and NK (scale of 1–3, ordered probit, APE)			Trusting SK over NK (scale inverted) (scale of 1–10, negative binomial, APE)			Cooperation in SK over NK (scale inverted) (scale of 1–10, negative binomial, APE)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
K-Identity	0.212	0.216	0.206	1.150	1.245	1.194	1.041	0.823	0.815
	(0.078)***	(0.103)**	(0.092)**	(0.050)**	(0.512)**	(0.586)**	(0.533)**	(0.427)**	(0.401)**
Age		0.002	-0.001		0.134	0.122		0.184	0.149
		(0.046)	(0.043)		(0.126)	(0.118)		(0.139)	(0.181)
Age^2		0.00002	0.00005		-0.006	-0.017		-0.002	-0.004
		(0.0005)	(0.0005)		(0.019)	(0.012)		(0.002)	(0.003)
Female		0.102	0.095		0.945	1.045		0.948	0.929
		(0.037)***	(0.048)**		(0.572)*	(0.695)		(0.474)**	(0.450)**
Marital Status		-0.101	-0.098		-0.302	-0.151		-0.158	-0.147
		(0.104)	(0.104)		(0.154)	(0.264)		(0.260)	(0.120)
Years After Leaving NK		-0.003	0.002		0.023	0.020		0.095	0.088
		(0.022)	(0.022)		(0.066)	(0.078)		(0.067)	(0.059)
Years of Living in SK		0.011	0.008		0.156	0.168		0.191	0.155
		(0.003)***	(0.003)***		(0.080)**	(0.073)**		(0.098)*	(0.077)**
Education		0.121	0.121		0.441	0.408		0.528	0.479
		(0.054)**	(0.037)***		(0.223)**	(0.190)**		(0.229)**	(0.101)***
Economic Status		-0.073	-0.067		0.402	0.371		0.304	0.258
		(0.102)	(0.094)		(0.481)	(0.355)		(0.318)	(0.217)
Group Dummies	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Regional Dummies	No	No	Yes	No	No	Yes	No	No	Yes
No. Observations	129	129	129	121	117	117	125	120	120
R^2	0.06	0.15	0.17	0.05	0.11	0.15	0.04	0.09	0.12

* Note: Robust standard errors are in parenthesis. $p < .10$, ** $p < .05$, *** $p < .001$.

Table 5

The Effect of the K-Identity on North Korean Refugees' Confidence and Life Satisfaction

	Confidence about Decision-Making (scale of 1–4, ordered probit, APE)			Confidence about NK Origin (dummy, probit, APE)			Life Satisfaction (scale of 1–10, negative binomial, APE)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
K-Identity	0.185	0.190	0.183	0.050	0.043	0.035	0.683	0.594	0.587
	(0.094)**	(0.072)***	(0.093)**	(0.029)*	(0.026)*	(0.019)*	(0.342)**	(0.243)**	(0.270)**
Age		0.027	0.035		-0.014	-0.017		-0.240	-0.135
		(0.073)	(0.037)		(0.078)	(0.049)		(0.210)	(0.192)
Age^2		-0.0003	-0.0001		0.0004	0.0001		0.004	0.001
		(0.0001)	(0.0002)		(0.0009)	(0.0001)		(0.007)	(0.002)
Female		0.091	0.102		0.119	0.124		0.841	0.755
		(0.134)	(0.201)		(0.056)**	(0.074)*		(0.470)*	(0.352)**
Marital Status		-0.097	-0.088		-0.096	-0.087		-0.369	-0.325
		(0.129)	(0.099)		(0.120)	(0.103)		(0.199)*	(0.205)
Years After Leaving NK		0.011	0.015		-0.015	-0.012		-0.094	-0.091
		(0.022)	(0.013)		(0.028)	(0.032)		(0.059)	(0.077)
Years of Living in SK		0.009	0.012		-0.057	-0.051		-0.229	-0.198
		(0.004)**	(0.005)**		(0.038)	(0.055)		(0.123)*	(0.116)
Education		0.237	0.179		0.230	0.144		-0.603	-0.696
		(0.056)***	(0.062)***		(0.207)	(0.123)		(0.631)	(0.593)
Economic Status		0.167	0.139		0.100	0.089		1.087	0.977
		(0.170)	(0.169)		(0.136)	(0.095)		(0.230)***	(0.355)***
Group Dummies	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Regional Dummies	No	No	Yes	No	No	Yes	No	No	Yes
No. Observations	129	124	124	128	123	123	113	111	111
R^2	0.03	0.13	0.14	0.02	0.06	0.07	0.03	0.22	0.27

* Note: Robust standard errors are in parenthesis. $p < .10$, ** $p < .05$, *** $p < .001$.

Table 6
Interaction Effects on North Korean Refugees' Social Trust and Cooperation
– K-Identity & Gender, Education, and Length of Living in South Korea

	Difference in Lending to SK and NK (scale of 1–3, ordered probit, APE)			Trusting SK over NK (scale inverted) (scale of 1–10, negative binomial, APE)			Cooperation in SK over NK (scale inverted) (scale of 1–10, negative binomial, APE)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
K-Identity	0.192	0.197	0.188	1.173	1.190	1.035	0.793	0.782	0.699
	(0.094)**	(0.088)**	(0.092)**	(0.655)*	(0.475)**	(0.621)*	(0.399)**	(0.398)**	(0.350)**
Female	0.091			1.031			0.887		
	(0.055)**			(0.765)			(0.434)**		
Identity*Female	0.030			0.023			0.055		
	(0.015)**			(0.044)			(0.029)*		
Years of Living SK		0.006			0.145			0.127	
		(0.003)**			(0.066)**			(0.056)**	
Identity* Years of Living in SK		0.010			0.071			0.040	
		(0.011)			(0.040)*			(0.029)	
Education			0.100			0.379			0.365
			(0.045)**			(0.157)**			(0.138)***
Identity*Edu.			0.032			0.259			0.210
			(0.017)*			(0.130)**			(0.093)**
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Group Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Observations	129	129	129	117	117	117	120	120	120
R^2	0.17	0.18	0.17	0.15	0.15	0.15	0.12	0.12	0.13

* Note: Robust standard errors are in parenthesis. $p< .10$, ** $p< .05$, *** $p< .001$.

Table 7
Interaction Effects on North Korean Refugees' Confidence and Life Satisfaction
– K-Identity & Gender, Education, and Length of Living in South Korea

	Confidence about Decision-Making (scale 1–4, ordered probit, APE)			Confidence about NK Origin (dummy, probit, APE)			Life Satisfaction (scale 1–10, negative binomial, APE)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
K-Identity	0.180	0.175	0.164	0.029	0.028	0.037	0.548	0.561	0.585
	(0.088)**	(0.090)**	(0.081)**	(0.016)*	(0.023)	(0.029)	(0.309)*	(0.258)**	(0.291)**
Female	0.093			0.119			0.692		
	(0.155)			(0.066)*			(0.329)**		
Identity*Female	0.091			0.015			0.079		
	(0.073)			(0.017)			(0.033)**		
Years of Living SK		0.006			-0.042			-0.173	
		(0.0035)*			(0.065)			(0.164)	
Identity* Years of Living in SK		0.012			0.015			0.032	
		(0.009)			(0.017)			(0.025)	
Education			0.153			0.138			-0.713
			(0.076)**			(0.079)*			(0.602)
Identity*Edu.			0.027			0.007			0.913
			(0.013)**			(0.004)*			(0.505)*
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Group Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Observations	124	124	124	123	123	123	111	111	111
R^2	0.14	0.14	0.15	0.08	0.08	0.08	0.26	0.28	0.27

* Note: Robust standard errors are in parenthesis. $p< .10$, ** $p< .05$, *** $p< .001$.