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No Man is an Island - Trust, Trustworthiness, and Social Capital among Syrian Refugees in Germany[#]

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Abstract

We analyze possible links between both trust and trustworthiness among Syrian refugees in Germany in relation to the refugees' involvement in two different forms of social networking (forming bonding ties with other refugees vs. forming bridging ties between refugees and Germans). We implement treatment conditions in which Syrian refugees play a trust game either with another Syrian refugee or with a German participant. Our results show that Syrians who engage in bonding networks show higher levels of trust and (un)conditional trustworthiness when they interact with a Syrian compared to when interacting with a German participant. In turn, the negative discrimination refugees display towards Germans decreases regarding trust and conditional trustworthiness, and vanishes regarding unconditional trustworthiness, for refugees engaged in bridging networks. The type of social ties created by the refugees correlates with their living conditions: newly arrived Syrian refugees tend to engage in bonding networks, whereas both staying longer in Germany and having a private home in Germany coincide with increased engagement in bridging networks. Thus, residence in a refugee camp appears to be an important barrier to the proliferation of social networks between hosts and refugees.

Key Terms: bonding, bridging, refugees, traumatic experience, trust, trustworthiness, social capital, experiments.

JEL classification: C93; D91; J15; Z13.

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1. Introduction

Socialization is a key process in the integration of migrant populations into their new societies. When migrants form ties to other subjects in the new hosting society, they are hopefully initiating a process of adopting values and norms of that society. Yet other types of socialization can also be a major jeopardy for societies. If migrants socialize almost exclusively with other migrants who speak the same language or originate from the same area, segregation and parallel societies may emerge (e.g., Bisin & Verdier, 2011). This can happen if migrants socialize exclusively among their peers, and do not invest themselves into integrative activities with the members of the local population. Consequently, it can be said that not all social networks are created equally: people's behavior will reflect the type of social networks that they belong to.⁶ Social networks may foster trust and trustworthiness between individuals and facilitate the exchange of resources within societies (Coleman, 1988),⁷ but they may also create distrust between groups. To a degree, analyzing refugees' social network usage along with their accompanying trust and trustworthiness levels towards Germans can be used to make predictions regarding the degree to which the integration of refugees – and migrants in general – is likely to be successful.

Social networks have attracted attention as a crucial element in our understanding regarding the adaptation of newcomers to a host country (Ryan et al., 2008; Allen, 2010; Elliot and Yusuf, 2014). After migration, members of social networks may provide each other accommodations, job information, information on social services, and emotional support (Boyd, 1989). Social networks that refugees join in the host country are likely to be a key element in facilitating their adaptation to the new socioeconomic environment. These may arise exclusively among refugees – bonding social networks, or between hosts and refugees – bridging social networks. The distinction between bonding and bridging networks builds on the influential

⁶ As Scott nicely summarizes, the metaphorical use of 'social networks' was made popular in classical German sociology - by Weber, Tönnies, and Simmel - in order to describe social relations as a web of interpersonal connections that bounds individuals together and have unintended consequences on individuals' actions (Scott, 1988).

⁷ Coleman emphasizes the importance of social capital for the formation of human capital. Specifically, he finds a positive correlation between social networks inside and outside the family, and remaining in high school until graduation.

work of Granovetter (1973).⁸ Putnam (2000) expands on the difference between bonding and bridging social networks. Broadly defined, bonding networks refer to within-group connections, and bridging networks denote connections between groups. Bonding social networks may create in-group favoritism and they may also, by contrast, create out-group antagonism, although this need not be the case (Putnam, 2000). Additionally, bridging social networks may bridge divisions among different ethnic communities (*ibid.*). Exploring the potential links between involvement in social networks and individual behavior is the main motivation for this study.

To analyze the relationship between the kind of networks Syrian refugees form and belong to in Germany and the potential effect on behavior, we conducted experiments with Syrian refugees in Germany. We question how the way in which Syrian refugees participate in social networks in their new environment correlates with different levels of trust and trustworthiness in experimental games. To learn whether the identity of the interacting partner matters, we randomly apply two treatments: a Syrian participant playing with another Syrian participant and a Syrian participant playing with a German participant.

Our study contributes to the increasing literature on the behavioral effects of migration both for the releasing and the receiving country.⁹ Khadjavi and Tjaden (2018) as well as Cettolin and Suetens (2019) have analyzed the behavior of subjects from the hosting nation towards migrants. Their findings show that the subjects from the hosting nation negatively discriminate against migrants from another country. Particularly, Khadjavi and Tjaden find that new arrivals to a public good setting are required to contribute over-proportionally for the benefit of the incumbent population. Cettolin and Suetens demonstrate that Dutch subjects are significantly less trustworthy towards refugees than towards other Dutch subjects.

⁸ Granovetter distinguishes between strong and weak ties. Strong ties exist between members of a group with significant similarities that frequently interact with one another, for instance, family and close friends. Weak ties are characterized by distant social relationships and infrequent interactions; these are usually found between acquaintances.

⁹ In our literature review, we consider both studies analyzing the behavior of, and the behavior towards, voluntary migration and forced migration (i.e., refugees). Quite a number of studies explore specific behavioral anomalies of refugees resulting from the experience of extreme violence, war and flight (e.g., Bauer et al., 2016, El-Bialy et al., 2020a).

Unlike Dutch trustors, refugees' trustors suffer payoff-wise on average a loss when playing the trust game with a Dutch trustee.¹⁰

A study by Barr and Serra (2010) analyses to which degree migrants transfer behavioral norms from their home societies – particularly, the acceptance of corruption – to decisions made in their new habitat. The authors show that migrants are more likely to accept corruption if it is a generally accepted practice in their home country. Yet the effect decreases significantly with the length of time the migrants have spent in the UK.

We add to the extant literature by analyzing potential transmission mechanisms between the specific form of a social network and individual behavior. That is, we test whether refugees who form social ties with others of the same or similar nationalities show different forms of trust and trustworthiness than those refugees who hold primarily ties with members of the hosting nation. In a second step, we explore whether refugees form predominantly bonding or bridging ties based on specific aspects of their living conditions of in Germany (in particular).

Our results show that the decisions Syrians make in trust games is influenced by the type of social networks they are involved in. Overall, involvement in bonding networks among Syrians positively correlates with more trust, and higher levels of both unconditional (independent of how much the other player trusts in the first place) and conditional (dependent on how much the other player trusts in the first place) trustworthiness between the members, compared to involvement in bridging networks. However, this effect is almost exclusively caused by the fact that Syrians engaging in bonding networks discriminate positively against other Syrians. That is, they show higher levels of trust and conditional trustworthiness towards potential members of the bonding network than when interacting with members of the hosting nation. This effect is significantly smaller with refugees engaged in bridging networks, and also with those refugees who are involved in both bonding and bridging networks. Regarding unconditional trustworthiness, Syrians involved in bridging networks do not favor fellow Syrians when compared to their interactions with a German participant, while Syrians involved in bonding networks

¹⁰ However, Jeworrek et al. (2018) find that the willingness to give money to individual refugees increases significantly when those refugees are known to provide volunteer activities for their peers or members of the hosting nation.

do so. This suggests that there is a link between co-ethnic solidarity and bonding networks that exists in early stages of the stay in the new environment: newly arrived Syrian refugees tend to engage in bonding -- strengthening co-ethnic ties, whereas those having stayed longer in Germany tend to engage more in bridging. Moreover, residence in private houses is significantly correlated with bridging activities of refugees, while residence in refugee camps is not. Therefore, staying in a camp seems to be a key barrier for the proliferation of social networks between hosts and refugees, and a crucial factor hampering integration efforts into the German society.

The rest of the paper is structured as follows: In the next section, we present the hypotheses we propose to test. Section three describes the game. Section four explains how the refugees were recruited and the experiments conducted. Section five reveals the results of our experiment. Section six shares our conclusions.

2. Framework and Hypotheses

The term “social capital” has had quite a career over the last couple of decades. It has been used in various disciplines, but a generally agreed upon definition has yet to emerge. In this study, we rely on Lin’s (2002) description of social capital as “investment in social relations with expected returns”. Investing in social capital can have positive returns since it may help individuals to reach their goals more effectively. However, it has long been acknowledged that investing in social capital does not necessarily generate positive externalities on society (Coleman, 1988, Putnam, 2000). Negative consequences such as sectarianism, ethnocentrism, and corruption, as well as positive consequences such as cooperation, trust, and mutual support, are two sides of the same coin when it comes to social capital (Putnam, 2000). In recognition of this, social capital has been categorized into two main types (Putnam, 2000; Paxton, 2002): bonding social networks – exclusive networks that tend to reinforce homogeneous groups, and bridging social networks – inclusive networks that tend to include people from diverse social backgrounds (Putnam, 2000). We utilize the contrasts between bonding and bridging networks to examine possible links to individual behaviors in different treatment scenarios among Syrian refugees in Germany.

Bonding networks have been characterized as a source of context-specific reciprocity and solidarity (Putnam, 2000). Migrants' social networks have been frequently considered as based on co-ethnic solidarity (Portes and Sensenbrenner, 1993; Sander and Nee 1996), and on high levels of trust that may increase the likelihood of exchange of resources (Coleman, 1988). We expect to find a link between refugees who engage in bonding networks and a positive discrimination towards fellow refugees, in terms of high levels of trust and trustworthiness between refugees. Social networks that bond refugees together can become a safety net for potentially traumatized refugees upon arrival, which can help facilitate resilience in the host country (Hurlbert et al., 2000). Moreover, valuable information about socio-cultural norms in the host country is likely shared through social networks among refugees. Being actively engaged in these social networks can help newly arrived refugees to adapt to the new environment. However, bonding capital may also have negative external effects for society, as it can exclude others from the expected returns (Staveren and Knorringa, 2007). Overall, it seems that refugees engaging in bonding networks positively discriminate against trustors from the same nationality. This implies

H1: Refugee participants who engage in bonding networks show higher levels of trust and unconditional trustworthiness when playing with potential members of the bonding network than when playing with others.

On the other hand, bridging networks can foster broader identities and general reciprocation (Putnam, 2000). Bridging networks arise out of volunteer interactions between individuals with different backgrounds. Reciprocity is a fundamental element for this way of networking, which can support collective action benefiting more members from all walks of society (Larsen et al., 2004). Inter-ethnic networks can be valuable to immigrants in many ways. Information related to the bureaucratic asylum process shared between hosts and refugees can be helpful for refugees. Additionally, having a wider social network with a high number of acquaintances facilitates immigrant participation in the host society and can be central to them accessing the labor market, as most employers are nationals (Heath and Yu, 2005). Bridging networks tend to rely to a much larger degree on mutual reciprocation, as its members have little in common per se. Therefore, we expect to find a strong link

between engaging in bridging networks and conditional trustworthiness between refugees and hosts, hypothesizing that:

H2: Bridging networks are associated with higher levels of conditional (i.e., reciprocal) trustworthiness compared to bonding networks.

There is some conceptional ambiguity when classifying bonding and bridging networks, because many social networks can have characteristics of both bonding and bridging simultaneously. Groups that share a similar background are not completely similar in every aspect, and may create bridging networks, as group members may belong to different generations, different genders, or have different levels of education. Conversely, groups that engage in bridging networks may involve individuals with the same age, gender or level of education.

To classify social networks into bonding and bridging ones we rely on previous research. Religious associations are predominantly conceived as having characteristics of bonding networks (Paxton, 2002; Menahem et al., 2011). They can reaffirm ethnic identities and facilitate the practice of familiar religious rituals (Hirschman, 2004).¹¹ Being part of a minority religion is usually associated with bonding social capital (Allen, 2010). In this study, participating in activities related to mosques is considered as involvement in bonding social networks. In contrast, community, human rights, environmental, and peace associations are categorized as networks that connect individuals who belong to different groups -- that is, as bridging networks (Paxton, 2002; Stolle and Rochon, 1998; Coffé and Geys, 2007). Accordingly, we include the following types of social networks to the category of bridging networks: youth clubs, sports clubs, student activities, neighborhood associations, and volunteer work.

¹¹ However, due to several contextual reasons, religious associations can also have a bridging aspect as they may connect refugees to the wider society. The religious backgrounds of refugees, the level of secularity in society, and the historical arrangements between state and religion are three important factors determining the bonding or bridging role of religious associations. In Western Europe, religious networks are mainly seen as creating bonding ties, while in the United States they play rather a bridging role (see Forner and Alba, 2008).

3. The Game

We use a version of the trust game that is very similar to that proposed by Berg et al. (1995) to measure subjects' trust and trustworthiness. There are two players, a trustor and a trustee, both receiving an identical initial endowment of 150 points. The trustor can send any amount of points to the trustee between 0 and 150 points, in multiples of 50 points. On its way to the trustee, the amount is tripled. This means that the trustee receives 150, 300, 450, or 600 points. The trustee then decides how many points to keep and how many to send back – if any. Subjects complete the game in both roles, trustor and trustee. Importantly, the trustee's decision is collected implementing the strategy method, revealing the number of points that the trustee would send back if the trustor sent 0, 50, 100 or 150 points to the trustor. The payment is then made between a randomly formed pair of players, one in the role of the trustor, the other in the role of the trustee. Payoffs were determined by matching the trustor's decision with the corresponding decision from the trustee's set of decisions.

Conventional economic rationale tells us that no points should ever be sent, because the trustee is expected to keep all the points (s)he has received. That is anticipated by the trustor who, therefore, does not send any points. Therefore, amounts sent by the trustor are referred to as trust in the literature, whereas amounts sent back by the trustee are interpreted as trustworthiness. To learn whether the identity of the interacting partner matters for both trust and trustworthiness, we apply two treatment conditions: a Syrian participant playing against another Syrian participant and a Syrian participant playing the game against a German participant.¹²

Notice that relying on the strategy method allows us to distinguish two motives as to why trustees return points to the trustor. On the one hand, the trustee could be generally altruistic towards the trustor (perhaps the trustee is, for instance, inequality averse and tries to equalize endowments by sending the money). We refer to this case as *unconditional trustworthiness*, as the trustee will return some points irrespective of whether the trustor sent any points in the first place. On the other hand, the trustee may return points because he or she desires to reciprocate the trust

¹² German participants were recruited to act as the counterparts for our Syrian participants under exactly the same conditions. However, throughout this paper we focus exclusively on the decisions of the Syrian participants,

of the trustor. We will denote this case as *conditional trustworthiness*: the trustee reciprocates the behavior of the trustor; in other words, the more points the trustor has sent the more points the trustee will return.

Reliance on the strategy method gives us five data-points for every participant (one when assuming the role of trustor and four when assuming the role of trustee, dependent on the four possible choices a trustor has in the first place) and enables us to separate unconditional from conditional trustworthiness. To do so, we run an individual ordinary least square estimation, with the four amounts sent back from the strategy method as dependent variables, and the four potential amounts sent by the trustor as independent variables. This procedure allows us to estimate a function consisting of an intercept and a slope of the amount sent. We interpret the slope as conditional trustworthiness (i.e., the share of a point of trust that is returned), while the intercept as our measure for the unconditional trustworthiness (i.e., the number of points that are transferred independently of the behavior of the interaction partner).

4. Experimental Procedure

The experiment underlying this study was conducted as a lab-in-the-field experiment between January 2017 and July 2018, in Germany.¹³ The authors have used a similar approach elsewhere to analyze, among other things, the specific behavior of Syrian refugees in Jordan (see El-Bialy et al., 2020 or of civil war victims inside Syria as in El-Bialy et al., 2020b).

Today, most experimental economists rely on established laboratory structures for recruiting their participants. For a variety of reasons, those methods do not work for recruiting Syrian refugees. We have tried our best to replicate the volunteer recruitment process usually carried out with students at university campuses, in which recruiters hand out invitations for an academic study. Syrian participants

13 Our experimental setting has been approved by the ethics committee for experimental research at the University of Hamburg. The authors are happy to provide further details upon request. This experiment was part of a larger study. The other games inquired into were (in this order): altruism, risk behavior, reciprocity, cooperation, and honesty. For more information visit: xxxanonymizedxxx.

were recruited via Syrian student assistants. Descriptive statistics regarding the refugee sample are contained in Table I in the appendix. German participants were invited to participate relying on the subject pool of a university's experimental laboratory for students, and for non-student citizens living in Hamburg (Bock et al., 2014). Descriptive statistics regarding the hosting society sample are contained in Table II in the appendix.

The instructions of the game were formulated in Arabic and written in a neutral way (see the Appendix for English version). Semantic equivalence was ensured by having a group of native speakers translate the English version into Arabic, then having a second group translate it back into English. Anonymity was guaranteed throughout the sessions, and it was made clear that participants could exit the study at any time and that the post-experimental questionnaire was not compulsory.

The experiment was followed by a post-experiment questionnaire with basic socio-demographic questions including age and gender, as well as questions related to participation in social activities in the host society. There were also questions related to post-traumatic-stress-disorder (PTSD) symptoms that people may experience after going through hurtful or terrifying events, which we denote here as “distress level”. In the distress part of the questionnaire, subjects could rate potential feelings of unease (e.g., “unable to feel emotions”) on a four-point scale ranging from “not at all” to “a little” to “quite a bit” to “extremely”.

The experiments were run in three different German cities — Hamburg, Stuttgart and Leipzig.¹⁴ In each location, facilitators with Syrian nationality contributed to the recruitment process by posting invitations to an academic study in reception centers, and also at places frequently visited by Syrians, such as German classes, Syrian restaurants, and universities. Additionally, we posted an invitational text on a social media group that we established in 2016 among Syrian refugees in Germany.¹⁵ During the experiment, questions raised by the participants were answered in private. Every participant was assigned a different personal code used

¹⁴ Controls for the location of the experiments can be found in the Appendix in Tables AIII and AIV. Results remain robust overall. However, living in Stuttgart coincides with higher amounts of trust and conditional and unconditional trustworthiness compared to Leipzig.

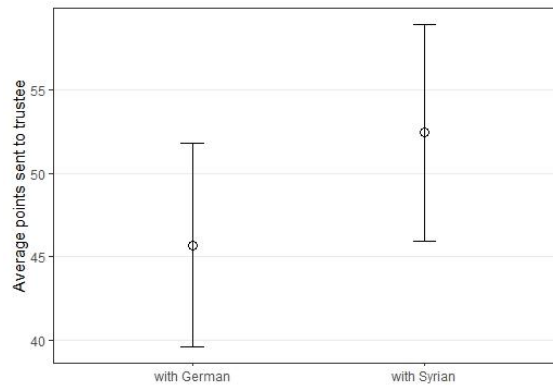
¹⁵ During the recruitment of Syrian refugees for our first pilot sessions in Germany, we realized that social networks were their main means of digital communication.

for claiming their payments. Points earned during the experiment were converted to Euros at a rate of 1 point to 0.01 Euro. The average duration of the trust game part of the experiment took about 10 minutes (a complete session lasted about 90 minutes), and average earnings in the trust game were 2 Euro (participants earned additional money in other parts of the experiment). At the end, these were handed out in sealed envelopes, and the specific amount received was kept confidential.

5. Results

As mentioned earlier, we implement a between-subjects treatment condition in which a Syrian participant either plays with another Syrian participant ($N=82$), or a German participant ($N=70$). Figure 1 shows trust results divided by our treatment condition. On average, Syrian trustors sent 45.7 points to a German trustee, compared with 52.4 points sent to a Syrian trustee. However, this difference in trust between treatment conditions is statistically insignificant (Wilcoxon rank sum test, $p\text{-value} = 0.5937$).

Figure 1. Trust



Figures 2 and 3 show the second variable of the game, trustworthiness, measured by the values for the individual intercepts and slopes (i.e., the unconditional trustworthiness and the conditional trustworthiness, respectively) estimated in our regression analysis mentioned earlier. Figure 2 shows the average intercept (i.e., the amount the trustee sends on average independent of the amount received by the

trustor). Syrians show on average an unconditional return of 32.9 points to a German trustor, while they return 54.4 points to a Syrian trustor. This difference proves to be statistically significant (Wilcoxon rank sum test, p -value = 0.0146).

Figure 3 illustrates the average slope (i.e., the share of a point of trust that is returned conditionally on the behavior of the trustor). The slope estimate for Syrian participants who interact with a German participant in the game yields 0.999 on average, which is fairly close to 1, meaning participants will be returning the same amount of points that they received. This is a minor form of cooperation, since trustees keep all the surplus for themselves. Syrian trustees who play with another Syrian participant send back on average 1.36 of the amount of points received, meaning they are sending back some of the amount tripled by the experimenter. This treatment difference is also statistically significant (Wilcoxon rank sum test, p -value = 0.0441).

Figure 2. Trustworthiness - Intercept

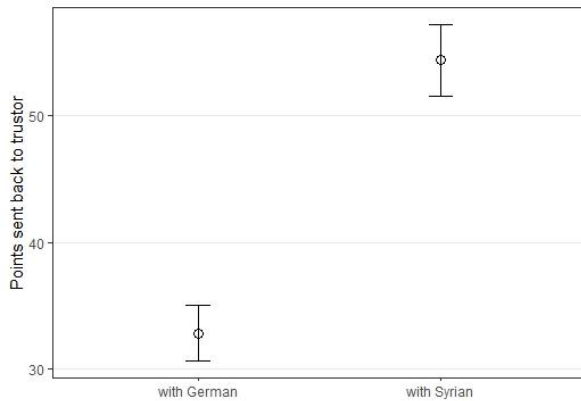
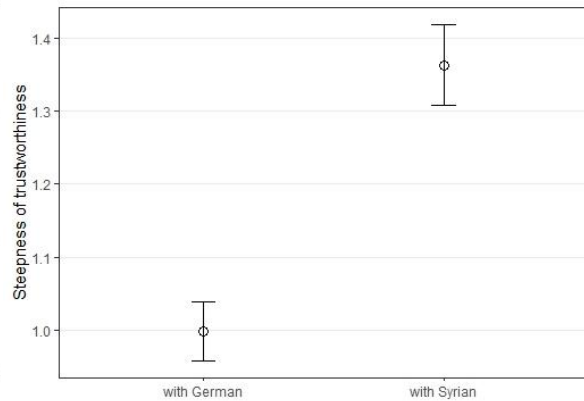


Figure 3. Trustworthiness - Slope



Additionally, in the post-experimental survey we elicit whether participants engage solely in bonding or bridging networks, or in both.¹⁶ In our sample, 15% of our

¹⁶

17 participants did not answer the questions relating to social capital. We cannot distinguish between participants who do not engage in any kind of social capital and those who decided to leave the question unanswered due to unknown reasons. Because of this, we restrict our analysis to participants that actually engage in social networks. The percentages here indicated are calculated without taking these 17 observations into consideration.

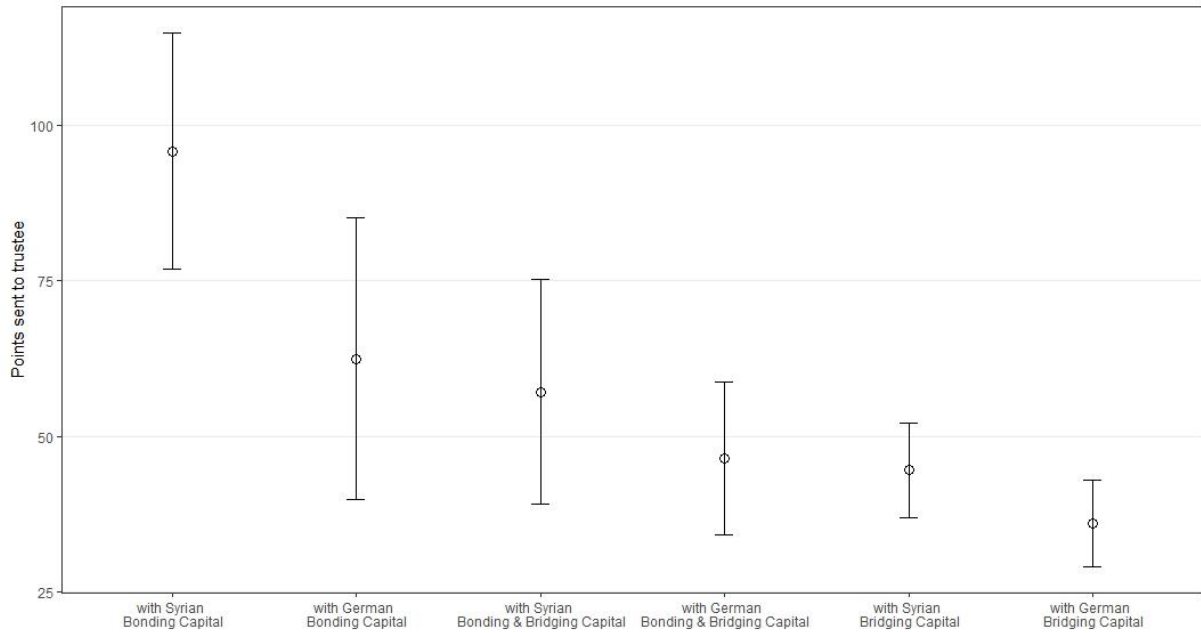
participants are solely engaged in bonding networks (hereafter: BonNet), 19% participate in both bonding and bridging networks (hereafter: BBNet), and 66% are engaged exclusively in bridging networks (hereafter: BriNet).

Figure 4 shows the average number of points sent by Syrian trustors. From left to right, we see the different ways in which Syrian participants engage in social networks: either exclusively through bonding, through both bonding and bridging, or through bridging only. Additionally, we add the treatment information of whether participants interacted with a Syrian or a German participant. Our between-subject experimental design allows us to see whether the identity of the receiver matters for the amount sent by the trustor, taking the different forms of participation in the two types of social networks into consideration. We find significant differences in trust levels across treatments.¹⁷ As shown in Figure 4, participating in bonding networks correlates with higher levels of trust towards other members of the “bonded” group. Specifically, Syrian participants who engage in bonding networks send more points to another Syrian participant compared to those Syrians who participate in bridging networks when they interact with another Syrian (Wilcoxon rank sum test, p -value = 0.01734).

¹⁷

Wilcoxon rank sum test: BonNet with Syrian and BonNet with German: p -value = 0.2916; BBNet with Syrian and BBNet with German: p -value = 0.8068; BriNet with Syrian and BriNet with German: p -value = 0.4684.

Figure 4. Average of Points Sent by Trustor (Trust)



As mentioned before, to analyze possible links between social networks and trustworthiness, we unbundle the behavior of the trustee into two components, an unconditional and a conditional one.

Figure 5 shows the values for the individual intercepts (i.e., the unconditional trustworthiness) estimated in our regression analysis. Syrians who engage in bonding networks display substantially higher levels of unconditional trustworthiness towards a fellow Syrian participant than those engaged in bridging networks (90 points versus 49 points). We interpret the high level of unconditional trustworthiness among Syrian participants who bond as co-ethnic solidarity. Treatment effects are visible, but only statistically significant for Syrians in bridging networks.¹⁸ Syrian participants who engage in bonding networks send on average 90 points unconditionally to another Syrian, while they send on average 70 points unconditionally to a German participant. Meanwhile, Syrians who bridge

¹⁸ Wilcoxon rank sum test: BonNet with Syrian and BonNet with German: p-value = 0.4612; BBNNet with Syrian and BBNNet with German: p-value = 0.6957; BriNet with Syrian and BriNet with German: p-value = 0.0306. This significant difference appears in need of further clarification, yet it is likely that the non-parametric tests fail to reject the H0 due to the limited number of observations in the bonding network group.

send on average 49 points to fellow Syrian participants, and 29 points to German participants.

Figure 5. Unconditional Trustworthiness Coefficients

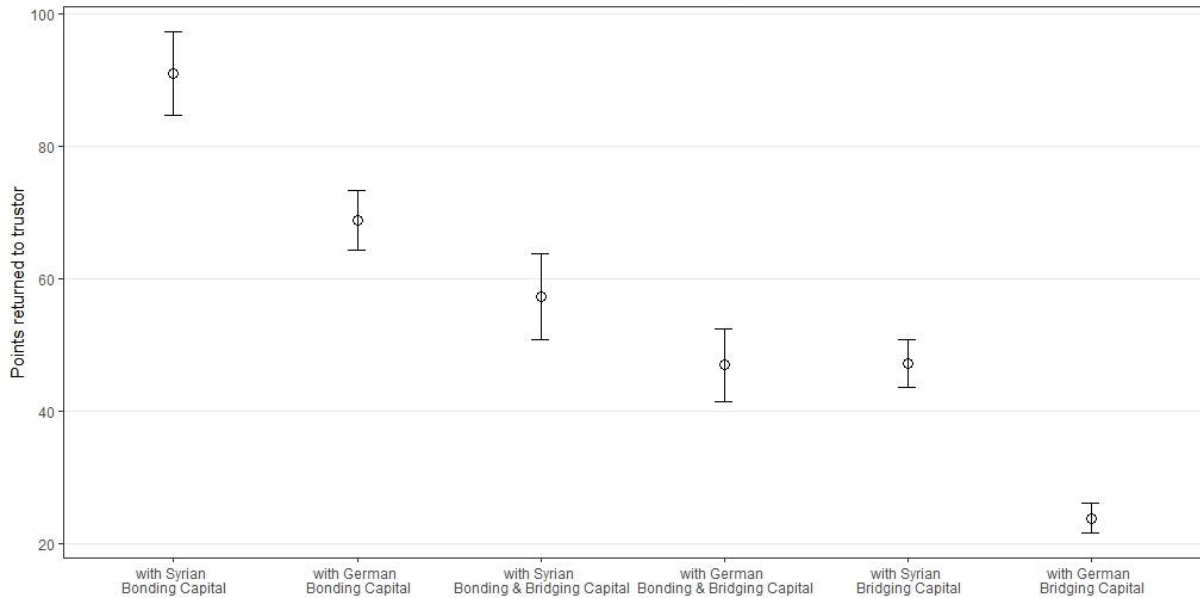


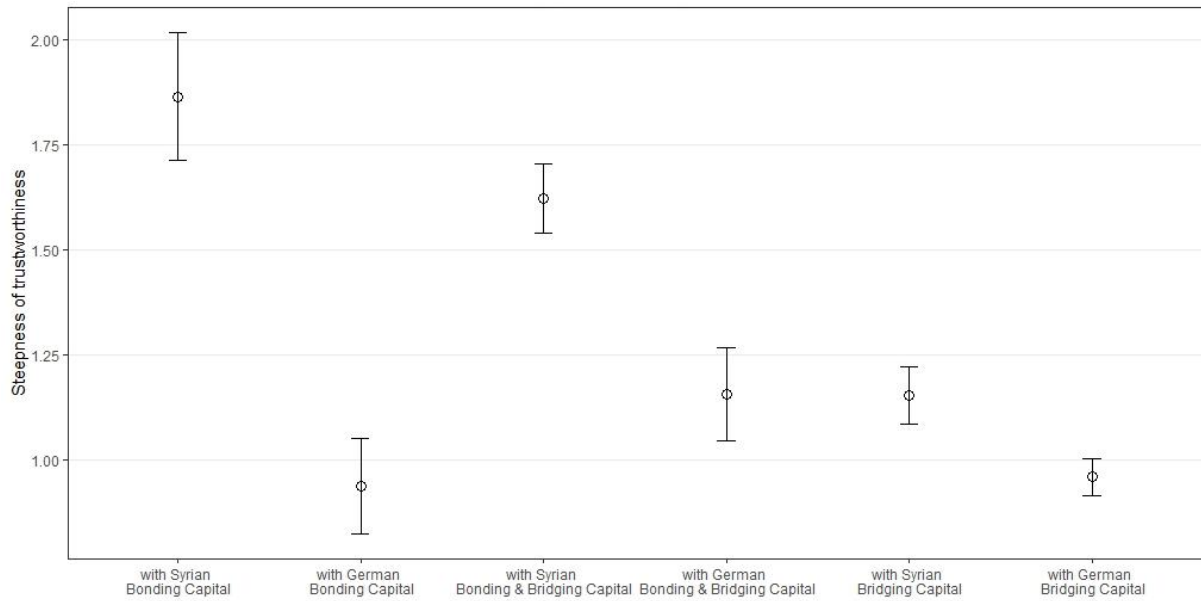
Figure 6 shows the coefficients for conditional trustworthiness.¹⁹ There is a significant difference in the way Syrians who engage only in bonding networks interact with other Syrians versus Germans, but not for those engaging in both bonding and bridging, or only in bridging social networks.²⁰ The difference in the slope estimates for Syrian participants who engage in bonding networks and interact either with a German or a Syrian participant equals 0.928, while the treatment slope difference among those who bridge is 0.194. Although both groups tend to favor fellow Syrians, the treatment effect among those who bond almost amounts to the whole amount of points sent by the trustor, while it decreases to around 20 percent for those who bridge.²¹

¹⁹ A slope of 1 means that a trustee always returns the same amount of points the (s)he received from the trustor.

²⁰ Wilcoxon rank sum test: BonNet with Syrian and BonNet with German: p-value = 0.0580; BBNet with Syrian and BBNet with German: p-value = 0.1536; BriNet with Syrian and BriNet with German: p-value = 0.6034.

²¹ One may argue that the slope of a linear estimation poorly characterizes conditional trustworthiness: trustees may increase their return rates the more points trustors send in the first place. This implies (at least) estimations including quadratic terms of the amounts sent. However, Figure AII in the Appendix shows the confidence intervals of return rates for all possible amounts sent and for each group of social capital separately. The sequence of confidence intervals appears to follow a linear trend rather than a quadratic form.

Figure 6. Conditional Trustworthiness Coefficients



For an in-depth analysis of these results, and to empirically test our hypotheses, we estimate the following regression models on trust and trustworthiness and test whether the social networks Syrian participants engage in affect individual behavior, explicitly controlling for potentially relevant confounders such as age, gender and education level. The OLS regression model in Table 1 focuses on trust.²² The dependent variable is the proportion of points sent by Syrian trustors and, hence, our measure for trust.²³ The constant term shows that bonding networks are positively correlated with trust among Syrians. The *BriNet* coefficient indicates the difference between refugees engaging in bridging and bonding networks (*BonNet* being the baseline for the social networks), while the interaction terms

²² Tables AIII and AIV in the Appendix provide robustness checks, including control variables for the location of the experiments.

²³ The independent variables include *Age groups*, which is a categorical variable describing groups of age from 1 to 7, with the lowest age group being from 16-26 years and the highest one above 66 years. *Education* is a categorical variable that runs on a scale from 1, “learned to read and write without being schooled”, to 6, “post-graduate degree”. *Male* is a dummy variable describing the gender of the participants. *Married* is a dummy variable describing the marital status of participants. *Length of residence* is a continuous variable that describes the time spent in Germany in months (with the lowest being 10 months, the highest being 67 months, and the mean, 24 months). *Distress Level* shows the average level of PTSD symptoms. Answers were coded on a scale from 1 (“not at all”) to 4 (“extremely”). If the average score is higher than 2.5, subjects are considered symptomatic for PTSD. Finally, *BBNet* and *BriNet* denote those participants that are engaged either bonding and bridging activities or in exclusively bridging activities respectively. The baseline is a dummy for exclusively participating in bonding activities. *WithGerman* denotes the treatment scenario in which a Syrian participant is matched in the experiment with a German participant.

*withGerman*BriNet* and *withGerman*BonNet* test for deviations from the overall trend when interacting with Germans. In other words, among Syrians who interact with another Syrian, those engaged in BriNet send significantly fewer points compared to those engaged in BonNet (technically, the proportion of trust decreases by 0.44 with a p-value < .01).

However, as selection into social networks is endogenous, we now estimate the effect of our randomized treatments within the same social network categorization. The first treatment difference is indicated by the *withGerman* variable: the coefficient shows the difference between *withGerman*BonNet* and *BonNet*. We find a negative and significant difference, insinuating that the identity of the interaction partner matters for the level of trust among Syrians who engage in *BonNet*. As mentioned above, *BonNet* is frequently related to high levels of intra-group trust. This result is, hence, in line with our first hypothesis: participants who engage in bonding networks show higher levels of trust when playing with potential members of the bonding network than when playing with outsiders. The following interaction terms show that the treatment effect remains marginal for participants who engage in both bridging and bonding and for those who only engage in bridging exclusively, as shown by the coefficients for *BBNet*withGerman* and *BriNet*withGerman*.²⁴ The potential confounders are never significantly associated with the number of points sent, except for Syrian males, who sent marginally more points.

24 F-tests for linear hypothesis testing of the effect of interaction terms yield insignificant results: *withGerman* + *withGerman*BBNet* = 0, p-value = 0.749; *withGerman* + *withGerman*BriNet* = 0, p-value = 0.421.

Table 1. OLS on Trust

	<i>Dependent variable:</i>
	Trust – Proportion of points sent (scale: 0 - 1)
Age groups	0.008 (0.030)
Education	-0.005 (0.030)
Male	0.143* (0.075)
Married	-0.008 (0.081)
Length of residence (in months)	0.003 (0.003)
BBNet	-0.308** (0.141)
BriNet	-0.443*** (0.118)
WithGerman	-0.413*** (0.157)
BBNet * WithGerman	0.367* (0.211)
BriNet * WithGerman	0.350* (0.177)
Constant	0.534*** (0.190)
Observations	128
Adjusted R ²	0.089
F Statistic	2.242** (df = 10; 117)

Note: * p<.1; ** p<.05; *** p<.01. Standard errors between parentheses

The OLS regression models in Table 2 analyze trustworthiness. The dependent variable in model 1 is the individual intercept indicating the number of points returned by the trustee, even without receiving points. This kind of unconditional trustworthiness can be interpreted as a proxy for co-ethnic solidarity when it appears within an ethnic group and not – or to a significantly lower extent – between groups. Again, the *BriNet* coefficient indicates the difference between refugees engaging in bridging and bonding networks (*BonNet* being the baseline for the social networks), while the interaction terms *withGerman*BriNet* and *withGerman*BonNet* test for deviations from the overall trend when interacting with Germans. Syrians who

engage in bonding capital and interact with a fellow Syrian send around 47 points more than those engaged in bridging capital. But again, endogeneity concerns loom large and we are, hence, particularly interested in the results of the randomized treatments.²⁵ The coefficient of the *withGerman* variable shows the effect of being randomly assigned to a German participant, compared to playing with a fellow Syrian. It is negative and marginally significant in regards to unconditional trustworthiness (10% level). In other words, Syrians who bond with fellow Syrians send per se more points back compared to those who interact with a German participant. This result corroborates our first hypothesis (although only at the margin): Syrian participants who engage in bonding networks show co-ethnic solidarity.

The dependent variable in model 2 is a coefficient estimated individually for each participant based on the number of points returned by the trustee that are conditional on the number of points sent by the trustor (i.e., the slope). In general, trust is reciprocated, yet not equally. Results show that there is — analogous to model 1 — a significant difference between *BriNet* and *BonNet*: among Syrians who play with a fellow Syrian, bonding network usage is associated with higher amounts of conditional trustworthiness compared to bridging network usage. We therefore cannot corroborate our second hypothesis according to which we expect participants in bridging networks to display higher levels of conditional trustworthiness compared to members of bonding networks. Although bridging networks are based on reciprocity and one could expect to see a link between the reciprocation of trust and bridging networks, the presence of an interacting partner seems to overrule the link between individual behavior and social networks. Again, we analyze the treatment effect to alleviate endogeneity concerns. There is a negative and significant coefficient for *withGerman*: Syrians who bond show higher levels of conditional trustworthiness when they play with a Syrian compared to when playing with a German participant (1% level). This effect is significantly reduced for Syrians who engage in bonding and bridging (10% level) and those who

25 Endogeneity concerns are an issue in many social capital studies (see, Mouw, 2006). Here, it could be the case that trust contributes to the formation of bonding capital, but it could also be the case that bonding capital contributes to the formation of trust. As far as we are concerned, this limitation is overcome with the implementation of random treatment scenarios.

exclusively engage in bridging (5% level). Finally, married Syrian participants tend to send a higher amount of points back conditional on the number of points received compared to those who are not married (5% level).

Table 2. OLS on Trustworthiness

	<i>Dependent variable:</i>	
	Trustworthiness – intercept	Trustworthiness – slope
	(1)	(2)
Age groups	0.001 (3.775)	-0.074 (0.070)
Education	-3.449 (3.830)	-0.057 (0.071)
Male	5.220 (9.470)	0.053 (0.176)
Married	2.907 (10.279)	0.448** (0.191)
Length of residence (in months)	-0.209 (0.423)	0.009 (0.008)
BBNet	-31.061* (17.911)	-0.275 (0.332)
BriNet	-46.793*** (14.991)	-0.788*** (0.278)
WithGerman	-35.566* (19.919)	-1.146*** (0.369)
BBNet * WithGerman	24.998 (26.772)	0.912* (0.496)
BriNet * WithGerman	14.577 (22.475)	0.970** (0.417)
Constant	105.131*** (24.035)	1.931*** (0.446)
Observations	128	128
Adjusted R ²	0.125	0.113
F Statistic (df = 10; 117)	2.813***	2.616***

Note: *p<.1; **p<.05; ***p<.01. Standard errors between parentheses.

To further analyze the determinants of bonding and bridging capital among Syrian refugees, we estimate two separate probit models: model (1) for the bonding network formation, and model (2) for the bridging network formation. We report the marginal effects with the same control variables as above. Furthermore, we introduce additional variables measuring the living conditions of participants,

including their distress levels as discussed above.²⁶ Bonding networks have been characterized as a source of resilience after experiencing a difficult situation. These kinds of networks can help refugees upon arrival to the host country through, for instance, providing comfort and sharing helpful information. Hence, it could be the case that individuals with high distress levels are more likely to participate in bonding networks. In contrast, we measure the living conditions by a dummy variable indicating whether refugees live in private housing. One could argue that private housing facilitates contact with the hosting population. Often, the neighborhood may be the only chance to meet Germans recurrently. Hence, it could be that refugees with private housing are more likely to form bridging networks than refugees who live in reception centers or refugee housing. Table 3 reports the mean marginal effects.

Model (1) shows that the association between mental distress and the participation in bonding networks is low. Interestingly, the length of residence in Germany is negatively and significantly correlated with *BonNet* (5% level). That is, Syrian refugees who have recently arrived in Germany primarily engage in bonding networks, while those networks decrease in their importance the longer refugees stay in Germany. This link underlines the fact that bonding networks can provide support for newly arrived refugees regardless of the individual level of distress. There are no other significant associations between socio-demographic variables and the formation of bonding networks.

The coefficients in model (2) indicate a major insight about the formation of bridging networks. In contrast to the development of bonding networks, the formation of bridging networks is not systematically linked to the length of residence in Germany. However, private housing in Germany is positively associated with the participation in bridging networks.²⁷ Private housing provides advantages for both the refugees as well as the (German) hosting population: by searching for and finding a private home to live in, the refugees have taken an

²⁶ For more information see part III of the Appendix.

²⁷ We cannot offer causal interference on this claim: it could be the case that refugees found a home because they are members of bridging social networks. Alternatively, it could be the case that because refugees interact with Germans in the neighborhood, they feel compelled to engage in bridging networks. Nonetheless, we consider this result as a useful insight, since it teaches us (at least) how refugees struggle with trusting the hosting society.

important step towards a more self-determined life, which is likely to increase self-esteem and well-being. Living in a private home also correlates with greater trust in members of the hosting society based on higher incidents of contact and bilateral exchange. Therefore, it seems plausible that private housing coincides with greater conditional trustworthiness.

A possible policy implication of these findings would suggest that the hosting society might be well advised to facilitate private housing options, as refugee camps and reception centers coincide with distrust, and foster segregation.

A final important note here is that having a paid job in Germany and living in private housing positively and significantly correlate with one another ($\rho = 0.217$, $p\text{-value} = 0.0096$).

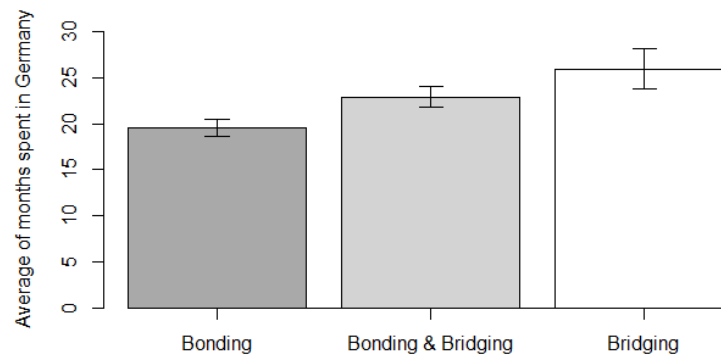
Table 3. Marginal effects for a Probit model on BonNet and BriNet

	<i>Dependent variable:</i>	
	<i>BonNet</i>	<i>BriNet</i>
	(1)	(2)
Age groups	0.01 (0.02)	-0.05 (0.04)
Education	-0.01 (0.03)	-0.02 (0.04)
Male	-0.07 (0.07)	0.09 (0.11)
Married	0.05 (0.08)	0.02 (0.11)
Length of residence (in months)	-0.01** (0.00)	0.01 (0.01)
Distress level	-0.01 (0.04)	-0.05 (0.06)
Private Housing	-0.04 (0.06)	0.20** (0.10)
Observations	128	128
Log Likelihood	-46.06	-74.65
Akaike Inf. Crit.	108.11	165.29

Note: *p<.1; **p<.05; ***p<.01. Standard errors between parentheses

The link between the length of residence in Germany and social networks is nicely depicted in Figure 4. It shows the average length of residence in Germany for Syrian participants grouped by bonding, bonding and bridging, and bridging. The average length of residence of those engaged in bonding networks is significantly lower than that of Syrian participants who are engaged in bridging networks — 19 months versus 26 months, respectively.²⁸ Logically, the development of cross-cutting social networks takes more time than those networks developed within a community.

Figure 4: Social Capital as a Function of Length of Residence



This is in line with existing research that shows a positive correlation between the length of residence and between-group social networking (Kasarda and Janowitz, 1974; Schulz et al., 2006). This result may indicate that the support required by newly arrived refugees differs from the support required after a lengthier stay. However, a longitudinal study would be needed to analyze this conjecture. It could also be that the length of stay in Germany has some important confounders, as it could be a proxy for living conditions: 32% of our Syrian participants were living in a refugee camp in Germany at the time the study was conducted. This variable negatively correlates with the length of residence in Germany ($\rho = -.4182$, $p\text{-value} < 0.001$).

28 Wilcoxon rank sum tests: *BonNet* and *BriNet* ($p\text{-value}=0.0164$); *BonNet* and *BBNet* ($p\text{-value}=0.0153$); *BBNet* and *BriNet* ($p\text{-value}=0.6706$). We also run a correlation test between bridging capital and the length of residence (Pearson's product-moment correlation: $\rho = 0.23$; $p\text{-value} = 0.01$).

Upon arrival in Germany, refugees must stay in refugee camps, also called first reception centers. Once they have been granted asylum they can move out of the reception center, either into refugee housing or private housing. Possibly, living in a refugee camp acts as a sort of natural barrier for social networking with members of the host society.²⁹ As mentioned by Burt (1997) and Putnam (2000), this correlation has vital implications for refugees, because refugees might benefit from bridging networks with members of the host society in order to help them adapt to the new socio-cultural environment more quickly.

6. Concluding remarks

In accordance with John Donne's famous line "no man is an island" (1624), we have determined that refugees' engagement in social networks is linked to their socio-economic behavior. To demonstrate this, we ran economic experiments with Syrian refugees in Germany, analyzing whether the way in which Syrian refugees participate in the host society is linked to trust and trustworthiness in different treatment scenarios. Among Syrians, use of bonding networks positively correlates with more trust and unconditional trustworthiness towards one another than does use of bridging networks. Moreover, regarding the treatment scenarios, Syrian participants who engage in bonding networks show higher levels of trust and conditional trustworthiness towards potential members of the bonding network than they show towards outsiders. This treatment effect is mostly marginal for those using only bridging networks or the combination of both types. Regarding unconditional trustworthiness, Syrians who engage in bonding networks also favor fellow Syrians over German participants, yet there is no treatment effect for those involved in only bridging networks or the combination of both. This suggests that a link exists between co-ethnic solidarity and bonding networks.

Immigrant participation in bonding social networks has been shown to have some negative effects for the new host society at times, because the bonding capital created often excludes "outsiders" from the expected returns. However, we believe that our results show that bonding capital can also be crucial for overcoming

29 There is a negative and significant correlation of living in a refugee camp and bridging capital ($\rho = 0.29$; $p\text{-value} < 0.001$). Detailed information regarding the standard procedure for asylum seekers in Germany are summarized in Appendix AII.

challenging situations, especially for refugees upon arrival in the host country. For example, moving to a new country often entails a disruption of past social connections, and establishing a new set of connections can be extremely helpful, even crucial, to immigrants and refugees facing the difficult task of starting a new life in a new and unfamiliar environment.

A refugee's length of residence and place of residence also play a relevant role in the evolution of their use of social networks. Newly arrived Syrian refugees tend to engage in social activities that strengthen co-ethnic ties, while for those with a lengthier stay in Germany, and those who reside in private housing in Germany, connections with the host society prevail. Both factors coincide with the formation of bridging ties and the mitigation of discrimination between Syrian and German interaction partners in the experiments. Conversely, residence in a refugee camp seems to act as a barrier to the creation of social networks between hosts and refugees, implying some manifestation of segregation. It is important that the hosting society set institutional conditions in ways that facilitate integration rather than segregation. Acquiring private housing and finding a new job both appear to be significant assets for immigrants along the integrating path.

Both bonding and bridging social networking are important tools that can be of great help to immigrants and refugees in their new host countries. Initially they can help establish safety nets, while later they can aid the immigrants in adapting to their new socio-cultural environment and progressing as active members of their new society. The indications that refugee involvement in voluntary social networks is associated with less segregation and discrimination (i.e., a decrease of the negative discrimination refugees display towards Germans regarding trust and conditional trustworthiness and the absence of a significant difference in unconditional trustworthiness, as shown in our regression analysis) is auspicious, as it is potentially much easier to encourage engagement in social networks than to change behavior related to social norms through other means.

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Appendix

AI. Demographic Statistics

Table AI. Sociodemographic of the Syrian sample

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age groups	152	3.007	1.349	1	2	4	7
Education	150	3.560	1.039	1.000	3.000	4.000	6.000
Male	150	0.753	0.433	0.000	1.000	1.000	1.000
Married	151	0.391	0.490	0.000	0.000	1.000	1.000
Length of residence (in months)	138	24.030	9.730	10.100	17.157	30.793	67.630
Distress Level	152	1.925	0.775	1	1.562	2.438	3.875
Residence in Camp	152	0.316	0.466	0	0	1	1
Importance of Religion	152	2.849	1.581	0	2	4	4

Age groups is a categorical variable describing groups of age from 1 to 7 with the lowest age group being from 16-26 years and the highest one above 66 years. Education is a categorical variable that runs on a scale from 1, “learned to read and write without being schooled”, to 6, “post-graduate degree”. Male is a dummy variable describing the gender of the participants. Married is a dummy variable describing the marital status of participants. Length of residence is a continuous variable that described the months spent in Germany in months (with the lowest being 10 months, the highest being 67 months, and the mean, 24 months). Distress Level shows the average level of PTSD symptoms. Answers were coded on a scale from 1 ("not at all") to 4 ("extremely"). If the average score is higher than 2.5, subjects are considered symptomatic for PTSD. Residence in Camp is a dummy variable denoting those participants that are residing in a refugee camp / reception center in Germany. Finally, Importance of Religion is a continuous variable running from 1 ‘not at all important’ to 4 ‘very important’ and denotes the importance of religion in life.

Table AII. Sociodemographic of the German sample

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age groups	88	4.341	1.728	2	3	6	7
Education	88	4.352	0.959	2	3	5	6
Male	88	0.557	0.500	0	0	1	1
Married	88	0.318	0.468	0	0	1	1
Distress Level	88	1.361	0.398	0.938	1.062	1.453	3.125

Variables' description is same as above.

Table AIII. OLS on Trust with controls for the city the experiments were run in

	<i>Dependent variable:</i>
	Trust
Age groups	0.014 (0.030)
Education	-0.001 (0.032)
Male	0.118 (0.077)
Married	-0.015 (0.081)
Length of Residence (in months)	0.009* (0.005)
BBNet	-0.305** (0.140)
BriNet	-0.402*** (0.119)
WithGerman	-0.409*** (0.156)
Hamburg	0.171 (0.121)
Stuttgart	0.213** (0.100)
BBNet * WithGerman	0.361* (0.209)
BriNet * WithGerman	0.335* (0.176)
Constant	0.220 (0.242)
Observations	128
Adjusted R ²	0.108
Residual Std. Error	0.338 (df = 115)
F Statistic	2.287** (df = 12; 115)

Note:

*p<.1; **p<.05; ***p<.01.
Standard errors between parentheses

Table AIV. OLS on Trustworthiness with controls for the city the experiments were run in

	<i>Dependent variable:</i>	
	Trustworthiness – intercept	Trustworthiness – slope
	(1)	(2)
Age groups	0.130 (3.759)	-0.058 (0.070)
Education	-1.060 (4.066)	-0.046 (0.076)
Male	4.529 (9.639)	-0.010 (0.180)
Married	0.829 (10.112)	0.426** (0.188)
Length of residence (in months)	0.231 (0.607)	0.024** (0.011)
BBNet	-32.286* (17.602)	-0.267 (0.328)
BriNet	-40.175*** (14.904)	-0.677** (0.278)
WithGerman	-33.726* (19.542)	-1.135*** (0.364)
Hamburg	9.199 (15.224)	0.439 (0.284)
Stuttgart	27.781** (12.581)	0.566** (0.234)
BBNet * WithGerman	24.353 (26.228)	0.895* (0.488)
BriNet * WithGerman	11.650 (22.045)	0.930** (0.411)
Constant	68.463** (30.367)	1.101* (0.566)
Observations	128	128
Adjusted R ²	0.160	0.142
Residual Std. Error (df = 115)	42.466	0.791
F Statistic (df = 12; 115)	3.021***	2.745***

Note:

*p<.1; **p<.05; ***p<.01.
Standard errors between parentheses

Figure AI. Trust

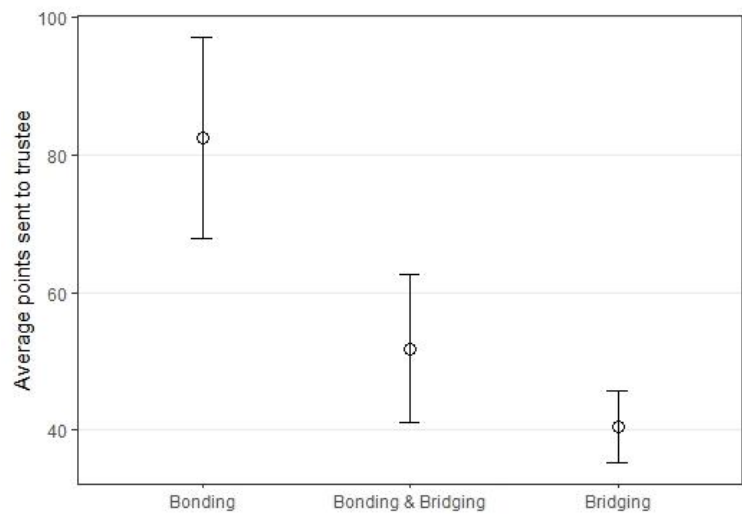
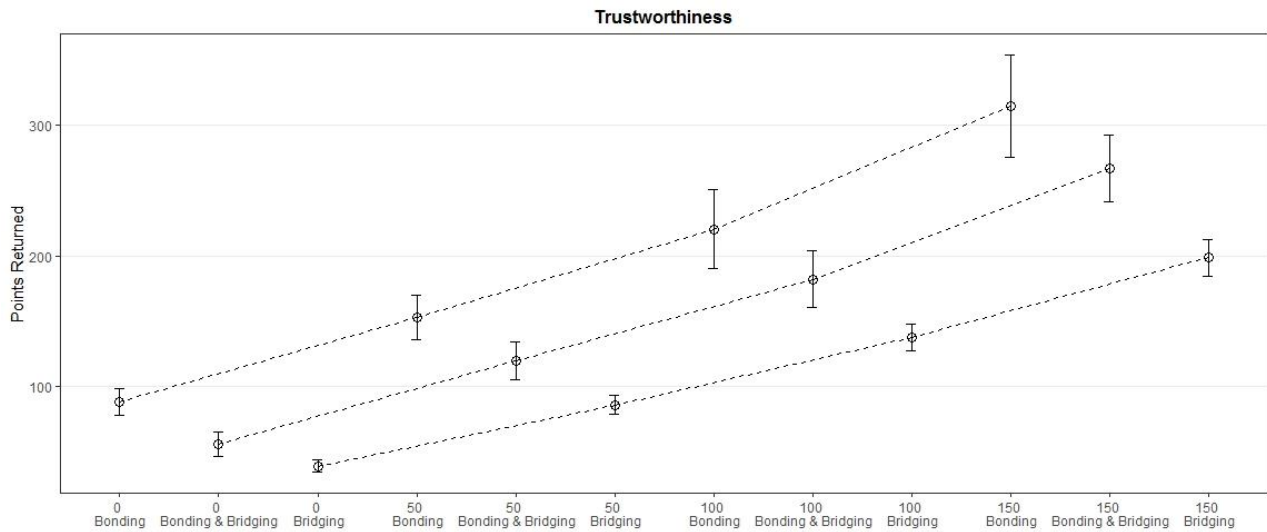


Figure AII. Trustworthiness



AII. The German Asylum Procedure

Here we briefly describe the procedures that refugees need to go through after arriving in Germany. Particular emphasis is on the steps that might cause more traumatization – like insecure or overcrowded reception facilities, or lengthy procedures during which refugees do not know with any degree of certainty whether their asylum application will be accepted or not.

Upon arrival in Germany, refugees are registered with a state organization (such as the border control, the police or reception centers). After having been registered, asylum seekers are distributed to a particular state according to a general formula.³⁰ In that state, they are provided shelter, food, and basic medical services in a reception facility. Due to the very high number of refugees coming to Germany, these facilities can be made up of containers or can be located in schools, empty home improvement stores and the like. Both the size of the facility as well as the degree of privacy the refugees enjoy there can potentially affect the degree of traumatization. The asylum application itself is submitted sometime during the stay in the reception facility. Before a personal hearing of the refugee takes place, the Federal Office for Migration and Refugees (which is in charge of the whole process) checks whether the so-called Dublin procedure has been complied with.³¹ The federal office decides. Even if the asylum application is turned down, many refugees might still be entitled to remain in Germany, e.g. because their home country is evaluated as “unsafe”. Those whose application has been refused have the possibility to sue the Federal Office. If the court upholds the administrative decision, the refugees are required to leave the country (BAMF, 2016a).

Due to the very high number of refugees who have arrived, particularly since 2015, this procedure took many months. Although the number of incoming refugees peaked in the second half of 2015, the peak in asylum applications was only reached in August 2016 – with more than 80,000 applications – indicating that many people

30 The so-called Königsteiner Schlüssel which takes into account the size of the state and the average income of its population.

31 It stipulates that the asylum request is processed in that EU member state that the refugee reaches first.

lived in reception centers for more than half a year before they could even submit their asylum application. In November 2016, almost half a million asylum seekers were waiting for the decision regarding their application, indicating that many more months may pass before a decision is made (all numbers from BAMF, 2016b).

Until their status has been decided upon, refugees are not allowed to work. They are offered language as well as so-called integration courses intended to familiarize them with everyday life in Germany. However, due to the limited number of courses offered, it can also take months before refugees can participate in any such course. In sum, the whole procedure can easily take more than a year, implying a very high degree of uncertainty for each refugee.

AIII. Questionnaire for PTSD Symptoms

The questionnaire consists of questions related to PTSD symptoms that people sometimes have after experiencing hurtful or terrifying events, which we denote here as ‘distress level’. In the distress part of the questionnaire, subjects could rate potential feelings of unease (e.g., “Unable to feel emotions”) on a four point scale ranging from “not at all” to “a little” to “quite a bit” to “extremely”.

The following are symptoms that people sometimes have after experiencing hurtful or terrifying events in their lives. Please read each one carefully and decide how much the symptoms bothered you in the past week.

Please choose the appropriate response for each item:

	Not at all	A little	Quite a bit	Extremely
Recurrent thoughts or memories of the most hurtful or terrifying events.				
Feeling as though the event is happening again.				
Recurrent nightmares.				
Feeling detached or withdrawn from people.				
Unable to feel emotions.				
Feeling jumpy, easily startled.				
Difficulty concentrating.				
Trouble sleeping.				
Feeling on guard.				
Feeling irritable or having outbursts of anger.				
Avoiding activities that remind you of the hurtful event.				
Inability to remember parts of the most hurtful events.				
Less interest in daily activities.				
Feeling as if you don’t have a future.				
Avoiding thoughts or feelings associated with the hurtful events.				
Sudden emotional or physical reaction when reminded of the most hurtful events.				

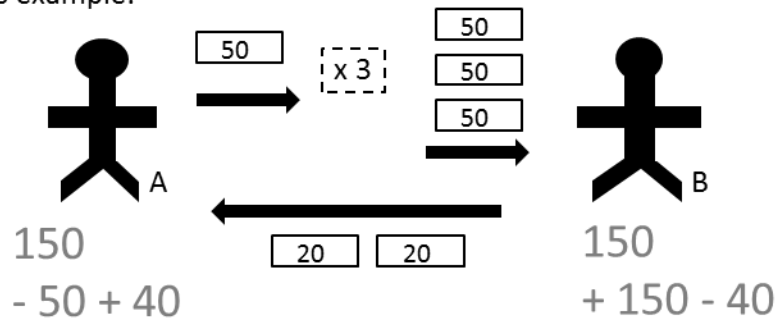
AIV. Instructions

Now consider yourself to be in the following situation with another Syrian refugee in Germany.

Here are the rules:

- Each person (A and B) receives **150 points** to start with.
- Person A can give away a share of his points to person B (between 0 and 150 points).
- WE will triple each point sent from person A and then give it to person B (hence if A gives 1 point to B, we will triple it and B receives 3 points).
- Person B then can decide to return any part or all the points he receives.

Have a look at this example:



First:

Person A gives person B 50 points: → B receives 150 additional points (50×3)
 → Now A has 100 points and B has 300 points

Second:

B sends 40 points back to person A: → A receives 40 additional points
 → Now A has 140 points and B has 260 points

In the following cases person A can give away 4 different amounts of points to person B: (0 points, 50 points, 100 points or 150 points). Person B can then return any amount of points (0 to all) to person A.

Please look at the following page. On the basis of this example, please choose how you are going to behave in this situation. You are once taking the position of person A and another time person B.

After all participants have completed the questionnaire, we will randomly select you and another Syrian refugee in Germany either as person A or person B and pay you accordingly.

How will you behave if you are person A?

I give



- ☐ 0 points (I then keep 150 points, person B has 150 points)
- ☐ 50 points (I then keep 100 points, person B has 300 points)
- ☐ 100 points (I then keep 50 points, person B has 450 points)
- ☐ 150 points (I then keep 0 points, person B has 600 points)

How will you behave if you are person B?

- If I have 150 points (person A has transferred 0 points):

I will send person A _____ points back

- If I have 300 points (person A has transferred 50 points):

I will send person A _____ points back

- If I have 450 points (person A has transferred 100 points):

I will send person A _____ points back

- If I have 600 points (person A has transferred 150 points):

I will send person A _____ points back

