

How Initial Cross-Group Friendships Prepare for Intercultural Communication:
The Importance of Anxiety Reduction and Self-Confidence in Communication

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This manuscript is a final draft of a manuscript accepted for publication in the International Journal of Intercultural Relations:

Florack, A., Rohmann, A., Palcu, J. & Mazziotta, A. (2014). How initial cross-group friendships prepare for intercultural communication: The importance of anxiety reduction and self-confidence in communication. *International Journal of Intercultural Relations*, 43, 278-288. <https://doi.org/10.1016/j.ijintrel.2014.09.004>

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We thank Verena Schmeink for collecting the data as a part of her diploma thesis.

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Abstract

We hypothesized that initial cross-group friendships lead to a reduction of intergroup anxiety and increase self-confidence in communication which in turn increases positive attitudes towards contact and facilitates further contact. Our hypotheses were derived from the anxiety and uncertainty management theory of communication (Gudykunst, 2005a). This theory postulates that individuals are more likely to approach interpersonal communication with strangers when they are able to manage anxiety and uncertainty. In the present research, we considered intergroup anxiety and self-confidence in communication as mediators in this process. We tested the predicted model in a study with Spanish-speaking immigrants in Germany ($N = 216$). Initial cross-group friendships were measured retrospectively. Furthermore, we assessed current intergroup anxiety, current self-confidence in communication, current attitudes toward contact, and current contact and current time spent with friends from the receiving society. The predicted model showed a good fit.

Key words: Cross-group contact, intergroup anxiety, self-confidence in communication

1. Introduction

Participation in the life of the receiving society has been regarded as a key driver of psychological health and well-being for individuals who immigrate into a new society. In a large international study in 13 societies and with more than 5,000 immigrants between 13 and 18 years of age, Berry, Phinney, Sam, and Vedder (2006) found that immigrants who preferred social activities involving members from the receiving society *as well as* immigrants showed the best psychological outcomes of acculturation (e.g., increased life satisfaction, reduced psychological problems; see, also Hendrickson, Rosen, & Aune, 2011; Kim & McKay-Semmler, 2013). Recent research implies that cross-group friendships can function as a good starting point for the development of positive attitudes toward participation in the life of the receiving society, and that cross-group friendships facilitate social interactions of immigrants with other members of the receiving society – especially when they are developed shortly after migration (Ramelli, Florack, Kosic, & Rohmann, 2012).

In the present research, we focused on two routes by which cross-group friendships can influence immigrants' attitudes toward host contact. Specifically, we studied whether the impact of immigrants' friendships with members of a receiving society on attitudes towards cross-group contact is mediated by intergroup anxiety and self-confidence in communication, and whether this effect extends to immigrants' current engagement in close cross-group contact. Our assumptions were inspired by the anxiety and uncertainty management theory of intercultural communication (AUM; Gudykunst, 2005a, 2005b). This complex theory of communication predicts that the likelihood that individuals will initiate communication with a member from a different cultural group depends on an affective component, anxiety, and a cognitive component, uncertainty. The theory supposes that individuals often avoid interaction with members of the receiving society because they are uncertain about how members of the receiving society will react to their communication attempts and what an appropriate communicative approach would be. The theory further postulates that uncertainty about the attitudes, values, behaviors, and potential responses of

members of the receiving society is accompanied by a feeling of unease or tension. While in the AUM theory uncertainty is understood in a very broad sense as the opposite of the confidence to predict the behavior of the respective out-group members (e.g., Gao & Gudykunst, 1990), in our research we focused on a particular form of confidence: the confidence that one is able to communicate effectively. In the present paper, we propose that immigrants who establish friendships with host nationals after arriving in a new society show reduced intergroup anxiety and an increased self-confidence in communication, which in turn leads to more positive attitudes toward cross-group contact with members from the receiving society, and, finally, to more cross-group contact at present. Recently, Pettigrew (2008, p. 187) put forward that “there is a continuing need to specify the processes of intergroup contact that explain its many effects.” The reported study responds to this demand by shedding light on two possible ways in which close experiences with cross-group contact (namely cross-group friendships) influence immigrants attitudes toward further cross-group contact.

1.1 Cross-group friendships and intergroup attitudes

The contact hypothesis (Amir, 1969) suggests that positive contact of immigrants with members of the receiving society is to some degree self-perpetuating, in the sense that positive contact leads to positive intergroup attitudes, which in turn lead to further cross-group contact (cf. Mazziotta, Mummendey, & Wright, 2011). Recent meta-analyses across several intergroup contexts do indeed support the notion that positive cross-group contact can lead to positive intergroup attitudes and openness to further cross-group contact (Pettigrew & Tropp, 2006), and imply that friendships can be regarded as a particularly advantageous form of contact that “invokes many of the optimal conditions for positive contact effects” (Pettigrew, Tropp, Wagner, & Christ, 2011, p. 275; see Davies, Tropp, Aron, Pettigrew, & Wright, 2011 for a review). Recent research in the domain of immigration confirmed the particular role of cross-group friendships in the development of positive intergroup attitudes. Geeraert, Demoulin, and Demes (2014) observed a consistent

positive correlation between the number of close host national friends and positive intergroup affect in a longitudinal study with sojourners. Kosic, Kruglanski, Pierro, and Mannetti (2004) asked immigrants to retrospectively indicate the number of host friendships they had shortly after arrival in the country. They found that the number of initial cross-group friendships was significantly correlated with positive attitudes towards cross-group contact and the participation in the life of the host community at present. Ramelli et al. (2013) reported very similar results. Page-Gould (2012) used a diary method to analyze cross-group friendships and found that individuals with close cross-group friendships were less likely to avoid cross-group contact after intergroup conflict experiences.

1.2 Anxiety and Self-Confidence in Communication

An interesting question is why friendships with members from the receiving society are so important for the openness to further cross-group contact. The Anxiety and Uncertainty Management theory (AUM; Gudykunst, 2005a, 2005b) provides a framework to approach this question by describing cognitive and affective challenges immigrants are likely to experience during early interactions with members of the receiving country. Specifically, the AUM theory proposes that individuals often lack knowledge about attitudes, values, and behaviors of strangers and that the „difficulties strangers experience in a new culture are due to their not being cognitively sure of how to behave (i.e., they have uncertainty)“ (Gao & Gudykunst, 1990, p. 302). The theory further argues that it is an important task for individuals to manage this uncertainty and the experienced anxiety in communication situations with strangers.

The AUM theory received support in several studies (e.g., Gudykunst & Nishida, 2001; Hammer, Wiseman, Rasmussen, & Brusckke, 1998; Mak, Brown, & Wadey, 2013; Rohmann, Florack, Samochowiec, & Simonett, 2014; Samochowiec & Florack, 2010). Samochowiec and Florack (2010), for example, showed the effects of both anxiety and uncertainty on openness for contact in an experimental study. Particularly relevant for the present research, Mak et al. (2013) found first evidence for the mediating role of intergroup anxiety and emotions associated with

interpersonal communication in the relationship between contact on intergroup attitudes. However, the mentioned studies were based on domestic students and did not examine immigrant groups, and, most importantly, they did not study self-confidence in communication with members from the receiving society.

Following the assumptions of the AUM theory, we argue that early cross-group friendships are one way of overcoming the experienced uncertainty and anxiety during cross-group interactions, thus enhancing further contact with members of the receiving society. We moreover suppose that uncertainty is particularly pronounced if it reveals a lack of self-confidence in communication. As explained in detail below, we therefore hypothesized that initial cross-group friendships help immigrants to reduce anxiety and increase self-confidence in communication which enhances positive attitudes toward cross-group contact and consequently facilitates further cross-group contact.

1.2.1 Intergroup anxiety

Intergroup anxiety is an extensively studied determinant of the willingness to interact with out-group members (Pettigrew et al., 2011; Stephan, 2014). Intergroup anxiety (Stephan & Stephan, 1985) is related to the feeling of stress, discomfort, and fear in the interaction with out-group members and can have several negative cognitive, behavioral, and affective outcomes. Most importantly for the case of immigrants' acculturation in the receiving society, it can negatively influence intergroup attitudes (Pettigrew et al., 2011) and even lead to avoidance of interaction and communication with out-group members (Barlow, Louis, & Hewstone, 2009; Plant & Devine, 2003).

In a large representative sample in Northern Ireland, Paolini, Hewstone, Cairns, and Voci (2004) found that friendships across religious groups had a positive effect on intergroup attitudes and that this influence was mediated by a reduction of intergroup anxiety. Barlow et al. (2009) conducted a study with White Australians. The authors report that cross-group friendships of White

Australians with Aboriginal Australians were related to a reduced level of intergroup anxiety, and, as a consequence, made an active avoidance of social interactions with Aboriginal Australians less likely (see also Ward & Masgoret, 2006).

Although prior studies have pointed to the importance of intergroup anxiety as a mediator of the influence of cross-group friendships on attitudes toward cross-group contact, this mediation has rarely been tested for immigrant groups (an exception as regards ethnic minorities is Binder et al., 2009). Studies examining immigrants' perspectives have likewise shown that initial cross-group friendships influence immigrants' later attitudes toward cross-group contact (e.g., Ramelli et al., 2013; Kosic et al., 2004). Intergroup anxiety was, however, not tested as a possible mediator in this context.

1.2.2 Self-confidence in communication

Besides intergroup anxiety, immigrants' self-confidence in communication can be assumed to be a further determinant of cross-group contact. It has been repeatedly stated that friends from the receiving society represent not only a source for emotional support and reduce anxiety, but are also a source of information and knowledge (Farh, Bartol, Shapiro, & Shin, 2010). Knowledge by members of the receiving society can be of very practical value. Members of the receiving society may, for instance, offer knowledge on how to deal with the bureaucracy and where to get medical assistance. But they could also provide knowledge about how to communicate (Laar, Levin, Sinclair, & Sidanius, 2005). We suppose that the daily communication with friends helps immigrants to learn the basic rules of communication in the receiving society and provides them with confidence in intercultural communication, which in turn facilitates further cross-group contact.

Communication refers to the process of attaching meaning to messages, transmitting them to others, and interpreting the messages received (Jandt, 2010). This complex process is not limited to the knowledge of language. Even individuals speaking the same language can have problems

understanding each other. Competence in communication means that misunderstandings are minimized and that a message is interpreted the way it was intended. To establish interpersonally effective communication, it is important to predict and interpret the behavior and responses of communication partners and to know how to behave in interpersonal communication contexts (Gudykunst & Nishida, 2001; Kim, 2005). Besides an objective understanding of communication competence, it is important whether individuals perceive themselves as effective communicators (Dean & Popp, 1990). Similarly to how individuals' beliefs in their capabilities in general influence which task they approach (Bandura, 1989), self-confidence in communication should influence whether individuals approach or avoid a social interaction (Gudykunst, 2005a, 2005b). In line with this reasoning, we assume that an important driver of positive attitudes toward cross-group contact is that immigrants perceive themselves as being able to communicate effectively with out-group members.

In sum, we expected that the relation between initial cross-group friendships and attitudes toward cross-group contact is mediated by immigrants' intergroup anxiety (H1) and self-confidence in communication (H2). Moreover, we hypothesized that this influence extends to immigrants' current cross-group contact (H3). The predicted model is depicted in Figure 1. This model also includes a direct path from initial to current contact, because the mere fact that contact already exists and might be continued should influence current cross-group contact.

2. The Present Research

We examined our hypotheses in a study with Spanish-speaking immigrants in Germany. We measured intergroup anxiety, self-confidence in communication, attitudes towards cross-group contact, and current engagement in close cross-group contact (i.e., proportion of cross-group friendships, as well as time spent with cross-group friends). We also asked participants to report retrospectively their initial friendships with members from the receiving society within the first three months after their arrival in Germany.

The present research adds to the existing literature with regard to four main aspects. First, the present research studied how initial cross-group friendships shape attitudes toward cross-group contact and current cross-group friendships. Previous research has already shown the importance of initial cross-group friendships (e.g., Page-Gould, Mendoza-Denton, & Tropp, 2008; Ramelli et al., 2013). However, it has not examined whether communication-related variables can explain an important part of these effects. Second, the present research examined basic implications of the AUM theory. While the AUM theory is based on the idea that anxiety and uncertainty affect behavior in cross-group communication settings, previous research did not study confidence in communication directly. Previous research on the AUM usually assessed uncertainty in a very broad sense (e.g., “How confident are you of your general ability to predict how Americans behave?”, Gao & Gudykunst, 1990, p. 308) and only in some cases included items directly related to self-confidence in communication (Hammer et al., 1998). The present research conceptualized uncertainty as a lack of self-confidence in communication and tested whether the predictions of the AUM theory for uncertainty in general also hold for the more specific variable of self-confidence in communication (or the lack of self-confidence in communication). Third, the presented research contributes to the extensive literature on intergroup anxiety by focusing on immigrants. In previous studies on intergroup anxiety, immigrants or non-dominant groups were only rarely examined. Fourth, the present research attempted to contribute to the understanding of the role of intergroup anxiety and self-confidence in communication for Spanish speaking immigrants in Germany. In 2012, more than 130.000 immigrants with origins in Spanish-speaking countries (e.g., Spain, Chile, Argentina) lived in Germany (Statistisches Bundesamt, 2013). Despite this fact, Spanish-speaking immigrants in Germany have not been in the focus of international migration or communication research for a long time. Only recently have Spanish-speaking immigrants received increased attention in migration research in Germany (Pfeffer-Hoffmann, 2014). Reasons for the increased research interest in this group are the strong social networks, the extensive self-organization, and

their success in education compared to other immigrant groups (Pfeffer-Hoffmann, 2014). An additional interesting aspect of Spanish-speaking immigrants in Germany, but also in the US (cf. Lueck & Wilson, 2011) is that the social networks of this group are not solely driven by their country of origin, but also by their common language.

3. Method

3.1 Participants

Two hundred and thirty-seven Spanish-speaking immigrants to Germany took part in the study. Of the participants, 101 (47 %) originated from Spain, 19 (9%) from Peru, 16 (7%) from Argentina, 12 (6%) from Columbia, 12 from Mexico (6%), 11 from Ecuador (5%), and 35 (20%) from other countries in which Spanish is the official language (e.g., Cuba, Chile, Guatemala, Venezuela, Dominican Republic). Participants were approached at different places (e.g., community centers, cultural associations, Spanish-speaking radio station and newspaper) by a research assistant and asked to fill out the questionnaire. Twenty-one questionnaires were excluded from analyses because they were incomplete or because participants indicated that they were born in Germany. Of the remaining 216 participants, 112 were female and 104 male. The mean age of participants was 39.09 years ($SD = 15.18$ years). The mean length of residence in Germany was 191.17 months ($SD = 177.42$ months). A majority of participants had college or university education (58%). The remaining participants indicated high school (24%) and primary school (18%) education as their highest level of education.

3.2 Procedure and Measures

A questionnaire was formulated in Spanish and included questions about background and demographic information, initial and current cross-group friendships with host community members, self-confidence in communication, intergroup anxiety, and other topics not relevant for the objectives of the present paper.

3.2.1 Initial cross-group friendships

Participants indicated how many of their friends during the first three months after arrival were members of the receiving society, using a five-point scale (1 = *none*; 5 = *almost all*).

3.2.2 Current self-confidence in communication

We measured current self-confidence in communication with five items ($\alpha = .71$) on a five-point scale (1 = *strongly disagree*; 5 = *strongly agree*) (e.g., “At present, I feel mostly competent when communicating with Germans” and “At present, I communicate mostly in an appropriate way with Germans.”) (cf. Laar et al., 2005). Participants’ scores were computed by averaging across items, with higher scores reflecting higher perceived self-confidence in communication at present.

We also measured self-confidence in communication at arrival in the new country ($\alpha = .70$) with four items (e.g. “At arrival, I felt mostly competent when communicating with Germans.”).¹

3.2.3 Current intergroup anxiety

We measured current intergroup anxiety by adapting a scale from Stephan et al. (2002). Participants were asked to describe how they would feel when meeting a German by rating 12 different adjectives ($\alpha = .84$) on a five-point scale (1 = *not at all*; 5 = *very much*) (e.g., “nervous,” “uncertain,” “comfortable” (reverse scored), and “at ease” (reverse scored)). Scores were computed by averaging across items, with higher scores reflecting greater intergroup anxiety.

3.2.4 Current attitudes towards cross-group contact

We measured current attitudes towards cross-group contact with members from the receiving society with ten items ($\alpha = .74$) adapted from Kosic et al. (2004), using a five-point scale (1 = *strongly disagree*; 5 = *strongly agree*) (e.g., “I like to spend time with Germans,” and “Among Germans there are people whom I can ask for help in case I need it”). Scores were computed by averaging across items, with higher scores reflecting more positive attitudes towards cross-group contact with members of the receiving society.

3.2.5 Current engagement in close cross-group contact

We measured current engagement in close cross-group contact with regards to the current proportion of cross-group friendships (i.e., “How many host friends do you have?”) on a five-point scale (1 = *none*; 5 = *almost all*), as well as the time spent with cross-group friends (i.e., “How often do you stay together with host friends?”) on a four-point scale (1 = *never*; 4 = *always*).

3.2.6 Background and demographic information

Participants responded to questions referring to gender, age, marital status, level of education, reasons for immigration, length of residence, country of origin, city of settlement, citizenship(s), reason for possessing host citizenship, and facility with the host language in the post-entry period.

4. Results

4.1 Descriptive Statistics

Table 1 shows the descriptive statistics and correlations of the measured variables. On average, participants indicated favorable attitudes toward host contact ($M = 3.97$, $SD = 0.62$), self-confidence in communication ($M = 3.94$, $SD = 0.79$), as well as low intergroup anxiety ($M = 2.00$, $SD = 0.64$). With regard to the number of initial cross-group friendships, 54 (25.4%) participants indicated that they had no cross-group friendships, 53 (24.9%) participants indicated that they had only few cross-group friendships after arrival, 51 (23.9%) participants stated that half of their friendships consisted of cross-group friendships, 12 (5.6%) participants indicated that about two-thirds of their friends were cross-group members, and 43 (20.2%) of the immigrants said that almost all of their friends came from the receiving society.

As hypothesized, initial cross-group friendships were related positively to current self-confidence in communication at present, $r(213) = .14$, $p = .039$, negatively to current intergroup anxiety at present, $r(213) = -.33$, $p < .001$, positively to the current attitude toward cross-group contact, $r(213) = .16$, $p = .023$, and positively to the current proportion of close cross-group friendships, $r(213) = .34$, $p < .001$, and to the current time spent with cross-group friends, $r(213) =$

.20, $p = .003$. Furthermore, current self-confidence in communication was positively related to current attitudes towards cross-group contact, $r(216) = .42, p < .001$, current cross-group friendships, $r(216) = .25, p < .001$, and the current time spent with cross-group friends, $r(215) = .27, p < .001$. Current intergroup anxiety was negatively related to current attitudes toward cross-group contact, $r(216) = -.29, p < .001$, current cross-group friendships, $r(216) = -.27, p < .001$, and the current time spent with cross-group friends $r(215) = -.27, p < .001$.

4.2 Effect of initial cross-group friendships on current attitudes toward contact and mediation by intergroup anxiety and self-confidence in communication

To test the hypothesized model (Figure 2), we applied structural equation modeling and tested the overall fit. Given that self-confidence in communication and intergroup anxiety were correlated (see Table 1), we allowed for correlations between these two variables in the model. The hypothesized paths were tested using Mplus (version 7.11; Muthén & Muthén, 1998–2013) with a maximum likelihood (ML) estimation. The goodness of our proposed model was evaluated on the basis of three goodness-of-fit measures. The statistical significance of the chi-square statistic indicates whether the proposed model fits the present data or not. More specifically, a good model fit would provide an insignificant χ^2 result (Barrett, 2007). Model estimation resulted in a non-significant χ^2 statistic ($\chi^2(5) = 8.945, p = .111$). However, because the chi-square test is sensitive to sample size and the number of parameters included in the model (Bentler & Bonett, 1980; Kenny & McCoach, 2003), it may provide only insufficient indication of goodness fit. Accordingly, we evaluated the fit of the model in terms of two alternative measures that are less sensitive to the number of model parameters or sample size: The comparative fit index (CFI; Bentler, 1990) compares the sample covariance matrix to a baseline model (in which all latent variables are uncorrelated) taking the sample size into account. The CFI ranges from 0 to 1, whereby values higher than .90 indicate a good model fit (Hu & Bentler, 1999). With a CFI of .98, our model shows an overall good model fit. This overall model fit is supported by a root means square estimation

error (RMSEA) of .06. The RMSEA indicates how well the proposed model would fit the population covariance matrix (Byrne, 1998). Values smaller than .10 are considered to be an indicator of a fair model fit (Diamantopoulos & Siguaw, 2000).

In sum, fit indices support our model, suggesting that the effect of initial cross-group friendships on immigrants' current attitudes toward cross-group contact is mediated by current intergroup anxiety and current self-confidence in communication, and, finally, leads to more cross-group friendships and more cross-group contact in general. The R^2 for the predicted variables are .12 for current time spent with cross-group friends, .19 for current cross-group friendships, .20 for current attitudes toward contact, .02 for confidence in communication, and .11 for intergroup anxiety.

To examine the hypothesized indirect effects directly, we tested whether the hypothesized indirect effects differed significantly from zero using bootstrapping procedure (5,000 re-samples). Table 2 contains the point estimates (and the respective confidence intervals) for the specific indirect effects of initial cross-group friendships on current attitudes towards cross-group contact, current cross-group friendships, and current time spent with cross-group friends. In line with the reported correlations, initial cross-group friendships predicted lower current intergroup anxiety, $b = -.15$, $SE = 0.03$, $\beta = -.33$, $p < .001$, which in turn predicted more positive attitudes towards cross-group contact, $b = .15$, $SE = 0.07$, $\beta = .16$, $p = .017$. This indirect effect (H1) equated to 0.02 ($SE = 0.01$), with the 95% bias-corrected confidence interval bound by 0.005 and 0.050. Zero fell outside this interval, which indicated the presence of a significant indirect effect of initial cross-group friendships on current attitudes towards host contact via intergroup anxiety. Similarly, initial cross-group friendships predicted greater current self-confidence in communication, $b = .08$, $SE = 0.04$, $\beta = .14$, $p = .043$, which in turn predicted more positive attitudes towards cross-group contact, $b = .28$, $SE = 0.05$, $\beta = .36$, $p < .001$. This indirect effect equated to 0.02 ($SE = 0.01$), with the 95% bias-corrected confidence interval (5,000 re-samples) bound by 0.002 and 0.046. Again, zero fell outside

this interval, which indicated the presence of a significant indirect effect of initial cross-group friendships on current attitudes towards cross-group contact via self-confidence in communication. Hence, results support the assumption that the effect of initial cross-group friendships on current attitudes toward cross-group contact is mediated by intergroup anxiety and self-confidence in communication. We further assumed that the reported effects spread to actual cross-group contact (H3). As can be seen in detail in Table 2, the indirect effects of initial cross-group friendships on current cross-group friendships and on current time spent with cross-group friends via self-confidence in communication and attitudes toward cross-group contact as well via intergroup anxiety and attitudes toward cross-group contact are all significant. Zero fell outside of all reported 95% bias-corrected confidence intervals. Besides this effect, the direct effects of initial cross-group friendships on current cross-group friendships, $b = .22$, $SE = 0.05$, $\beta = .30$, $p < .001$, and current time spent with cross-group friends were also significant, $b = .08$, $SE = 0.03$, $\beta = .15$, $p = .018$.

5. Discussion

For individuals who immigrate into a new country, it is often a difficult and challenging task to establish contact with members of the receiving country. In this article, we referred to the AUM theory (Gudykunst, 2005a, 2005b) and put forward that feelings of anxiety associated with interpersonal communications with members from the receiving society, and a perceived lack of self-confidence in communication may contribute to the difficulty of establishing contact with members from the receiving society. Furthermore, we argued that cross-group friendships are ideal for reducing intergroup anxiety and creating self-confidence in communication, thus leading to positive attitudes towards cross-group contact, and, ultimately, to more frequent contact with members from the receiving society. To test this assumption, we asked participants to indicate their initial cross-group friendships shortly after arrival in the receiving country, and we also measured attitudes towards cross-group contact and current engagement in close cross-group contact (i.e.,

proportion of cross-group friendships and time spent with cross-group friends). The data provide strong support for our assumptions.

Previous research on cross-group contact has repeatedly illustrated the important role of intergroup anxiety as a mediator of the effects of cross-group contact on intergroup attitudes (Pettigrew et al., 2011). However, previous efforts focused mainly on domestic groups or examined mostly attitudes towards cross-group contact from a perspective of the receiving society (e.g., Barlow et al., 2009; Mak et al., 2013). The impact of cross-group friendships on immigrants' intergroup anxiety received less attention. Hence, the present study contributes to previous research by showing that intergroup anxiety is an important mediator for the effects of immigrants' initial cross-group friendships on attitudes towards cross-group contact.

In addition, the present research confirms the validity of the AUM theory (Gudykunst, 2005a, 2005b), which has postulated that, besides intergroup anxiety, uncertainty is an important variable that facilitates cross-group contact. We examined the lack of confidence in communication as a specific form of uncertainty. Although we found that intergroup anxiety and (the lack of) self-confidence in communication were correlated, both explained a unique proportion of the variance of the attitudes towards contact. Our finding that intergroup anxiety and self-confidence in communication are nevertheless related is not surprising and was reported in other studies, as well (Gudykunst & Nishida, 2001). Indeed, it is plausible that individuals who perceive themselves as lacking competences in communication are more anxious in social interactions, or that anxiety might bias immigrants' perceptions of their communication competence (see Mazziotta et al., 2011).

An interesting question is how anxiety and self-confidence in communication affects intergroup attitudes and further cross-group contact at different stages of the acculturation process. A recent meta-analysis by Davies and colleagues (2011) suggests that time spent with out-group members and self-disclosure to out-group members evoke the strongest effects on intergroup

attitudes. However, as Davies et al. put forward, it is unlikely that initial friendships start with deep self-disclosure. Rather initial friendships offer the opportunities to reveal some personal information and to validate and modify views about the out-group. We agree with the authors that such a process offers the basis for the development of mutual trust and the reduction of initial anxiety that could otherwise impede cross-group contact. In a similar vein, research on induced friendships (Page-Gould et al., 2008) shows that, already in an initial phase, friendships can have anxiety reducing effects. In addition to the anxiety reducing effects of initial friendships, our results suggest that initial friendships offer the opportunity to exercise and improve communication and to develop self-confidence in communication. This increase in self-confidence in communication and the associated reduction of cognitive uncertainty may facilitate the approach of further interpersonal cross-group communication besides the reduction of anxiety.

While the mentioned processes might already take place in an early phase of acculturation, it is likely that, in addition, a gradual process occurs over time. The results of the present study suggest that initial cross-group friendships lead to a reduction of anxiety and an increase in self-confidence in communication, and, mediated by these variables, to positive cross-group attitudes and further cross-group contact. At later stages of the acculturation process, deeper self-disclosure and also a reduced salience of the group categories (Paolini, Harwood, Rubin, Husnu, Joye, & Hewstone, 2014) might follow, evoking even more positive effects on intergroup attitudes. Since participants in the present study already have lived in the receiving country for several years, it is likely that the observed correlations between initial cross-group friendships and the current cross-group contact are the result of the full range of these processes.

The results of the present studies as well as the reasoning above imply that initial cross-group friendships are a possible starting point for the adaptation of immigrants and for the development of positive intergroup relations. In this light, the legitimate question arises whether this at all can be a starting point that is easy to implement. Indeed, assuming that indirect contact is

easier to implement, research on intergroup contact moved to the study of other forms of contact (see for a review Harwood, 2010) like indirect contact via in-group friends (Mazziotta et al., 2011), media contact that is processed like interpersonal contact (Schiappa, Gregg, & Hewes, 2005), or imagined contact (e.g., Turner, Crisp, & Lampert, 2007). We agree that it is difficult to establish face-to-face cross-group contact, but the likelihood that such contact is taking place in everyday life – even without being intended or initialized by immigrants – is much higher for immigrants than for members of the receiving society, and moreover research shows that such contact can be facilitated (Gaither & Sommers, 2013, Page-Gould et al., 2008).

An approach to initiate friendships in a school or work context could be the organization of voluntary meetings in which immigrants are assigned to a partner from the receiving society. In such “friendship meetings”, procedures with progressive self-disclosure can be used (cf. Aron, Melinat, Aron, Vallone, & Bator, 1997). Findings indicate that such procedures help to initiate cross-group friendships (Page-Gould et al., 2008). Of course, these approaches are very limited in scope, but they are good examples that friendships can be facilitated.

To sum up, the present results strongly support the assumptions made by the AUM theory, and they suggest that cross-group friendships can pave the way for further contact of immigrants with members from the receiving society by reducing immigrants’ intergroup anxiety and enhancing their self-confidence in communication. The present study did not examine how exactly immigrants’ initial cross-group friendships help to reduce intergroup anxiety and self-confidence in communication. At this point, we can only speculate about these processes. On the one hand, it seems conceivable that cross-group friendships offer a secure base to explore the receiving society, which in case of distress provides emotional support (cf. Mikulincer & Shaver, 2001; Rohmann et al., 2014). Indeed, research has repeatedly shown that friendships can reduce the stress-level, in general (Hawkley & Cacioppo, 2010), and, in social interactions with out-group members, in particular (Page-Gould, Mendoza-Denton, Alegre, & Siy, 2010). On the other hand, cross-group

friendships provide knowledge about communication norms and rules and offer a safe space to exercise social interactions. This may contribute to both an objective and a subjectively experienced improvement of immigrants' communication competence, which might fuel positive attitudes toward contact on both sides.

A limitation of the present study is that we measured initial cross-group friendships retrospectively and did not apply a longitudinal design. However, because the first months in a new country represent a very important episode in life, we assume that it is unlikely that immigrants fail to remember their initial cross-group friends during this stage. Nevertheless, it might be that answering the questionnaire triggered vivid memories of initial cross-group friendships, which could have affected intergroup anxiety and self-confidence in communication at present. Still, this would not weaken the basic implications of the present study that immigrants' cross-group friendships reduce intergroup anxiety and increase the self-confidence in communication, and as a consequence increase positive attitudes towards cross-group contact and actual cross-group contact. But it might be that we overestimate the actual influence of initial cross-group friendships on intergroup anxiety, self-confidence in communication, and attitudes towards cross-group contact after such a long time. Hence, future longitudinal studies might examine the long-term effects of initial cross-group friendships in a more appropriate way. Without doubt a longitudinal design over the full time range of several years is very difficult to apply, but the test of more time-limited phases like, for instance, during the first year after immigration would be possible. Also, future studies might focus on other immigrant groups to examine whether the findings can be replicated for different immigrant groups. We consider the group of Spanish speaking immigrants in Germany to be highly interesting, because this group is one of the major immigrant groups in Germany which at the same time differs from other prominent immigrant groups in Germany, with regards to the positive adaption and the educational success of the Spanish speaking immigrants' children (Pfeffer-Hofmann, 2014). While the positive adaption of Spanish speaking immigrants who at the

same time are continuously involved in a strong Spanish cultural network, makes the study of this group important, the results revealed with research on this group might not hold for immigrants in general. Indeed, the same factors that drive the positive adaption of Spanish speaking immigrants might already help them to build friendships with members from the receiving country in the first place. Therefore, the results should be replicated in different cultural contexts in the future.

6. Conclusion and Practical Implications

In the past, policies and historic developments have often made close contact between immigrants and members from the receiving societies difficult at an initial stage of immigration. The guest worker system in parts of Europe where immigrants were mainly segregated because they were expected to go back to their home countries (Oezcan, 2004; Schlueter, 2012) is a good example. The results of the present study imply that it is very important to offer opportunities for contact and support friendships between immigrants and members of the receiving society already during an initial phase of immigration. In this phase, cross-group friendships can help to reduce anxiety and uncertainty in cross-group communication and to enable immigrants to approach interpersonal contact in the receiving society. Indeed, high anxiety and low self-confidence in communication may lead to the avoidance of important interactions with members from the receiving society like going to a doctor or going to a job interview, which can have serious financial and health consequences for immigrants (Asanin & Wilson, 2008; Gao & Gudykunst, 1990). The results of the present study are promising, because they show that finding cross-group friends in an early phase of acculturation is possible and has positive consequences for the development of further cross-group contact. However, we found the observed correlations for a group that in many respects shows a more advantageous adaption compared to other working immigrants in Germany (Pfeffer-Hoffmann, 2014). It is a challenging task for future research to study which characteristics enable immigrants to find friends in the receiving society and how the process of finding friends can be supported.

6. References

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Footnotes

¹ The items measuring self-confidence in communication at arrival corresponded to those measuring self-confidence in communication at present. However, due to a technical error, one item was not administered in the scale measuring self-confidence in communication at arrival, resulting in a four-item scale. Therefore, we did not use this scale in the analysis. For the interpretation of the results it is important to note that attitudes towards contact are positively correlated with self-confidence in communication at present ($r(216) = .42, p < .001$), but not with self-confidence in communication at arrival ($r(216) = -.05, ns$). Hence, the differences in self-confidence in communication at arrival cannot explain the reported effects on attitudes toward contact.

Table 1

Means and Standard Deviations of Measured Variables and Their Zero-Order Intercorrelations

Variable	<i>M</i> (<i>SD</i>)	1.	2.	3.	4.	5.
1. Initial Cross-Group Friendships	2.70 (1.43)	–				
2. Current Self-Confidence in Communication	3.94 (0.79)	.14*	–			
3. Current Intergroup Anxiety	2.00 (0.64)	-.33***	-.35***	–		
4. Current Attitudes Towards Cross-Group Contact	3.97 (0.62)	.16*	.42***	-.29***	–	
5. Current Cross-Group Friendships	3.07 (1.06)	.34***	.25***	-.27***	.34***	–
6. Current Time Spent with Cross-Group Friends	3.04 (0.73)	.20**	.27***	-.27***	.32***	.56***

Note. * $p < .05$; ** $p < .01$ *** $p < .001$.

Table 2

Point Estimates of Specific Indirect Effects of Initial Cross-Group Friendships on Current Attitudes Towards Cross-Group Contact, Current Cross-Group Friendships, and Current Time Spent with Cross-Group Friends

Predictor	Mediator(s)	Criterion	PE	SE	95% BC CI
Initial Cross-Group Friendships	Current Intergroup Anxiety	Current Attitudes Towards Cross-Group Contact	0.02	0.01	0.005, 0.050
Initial Cross-Group Friendships	Current Self-Confidence in Communication	Current Attitudes Towards Cross-Group Contact	0.02	0.01	0.002, 0.046
Initial Cross-Group Friendships	Current Intergroup Anxiety, Current Attitudes towards Cross-Group Contact	Current Cross-Group Friendships	0.01	0.01	0.004, 0.029
Initial Cross-Group Friendships	Current Self-Confidence in Communication, Current Attitudes towards Cross-Group Contact	Current Cross-Group Friendships	0.01	0.01	0.001, 0.026
Initial Cross-Group Friendships	Current Intergroup Anxiety, Current Attitudes towards Cross-Group Contact	Current Time Spent With Cross-Group Friends	0.01	0.01	0.002, 0.022
Initial Cross-Group Friendships	Current Self-Confidence in Communication, Current Attitudes Towards Cross-Group Contact	Current Time Spent With Cross-Group Friends	0.01	0.01	0.001, 0.020

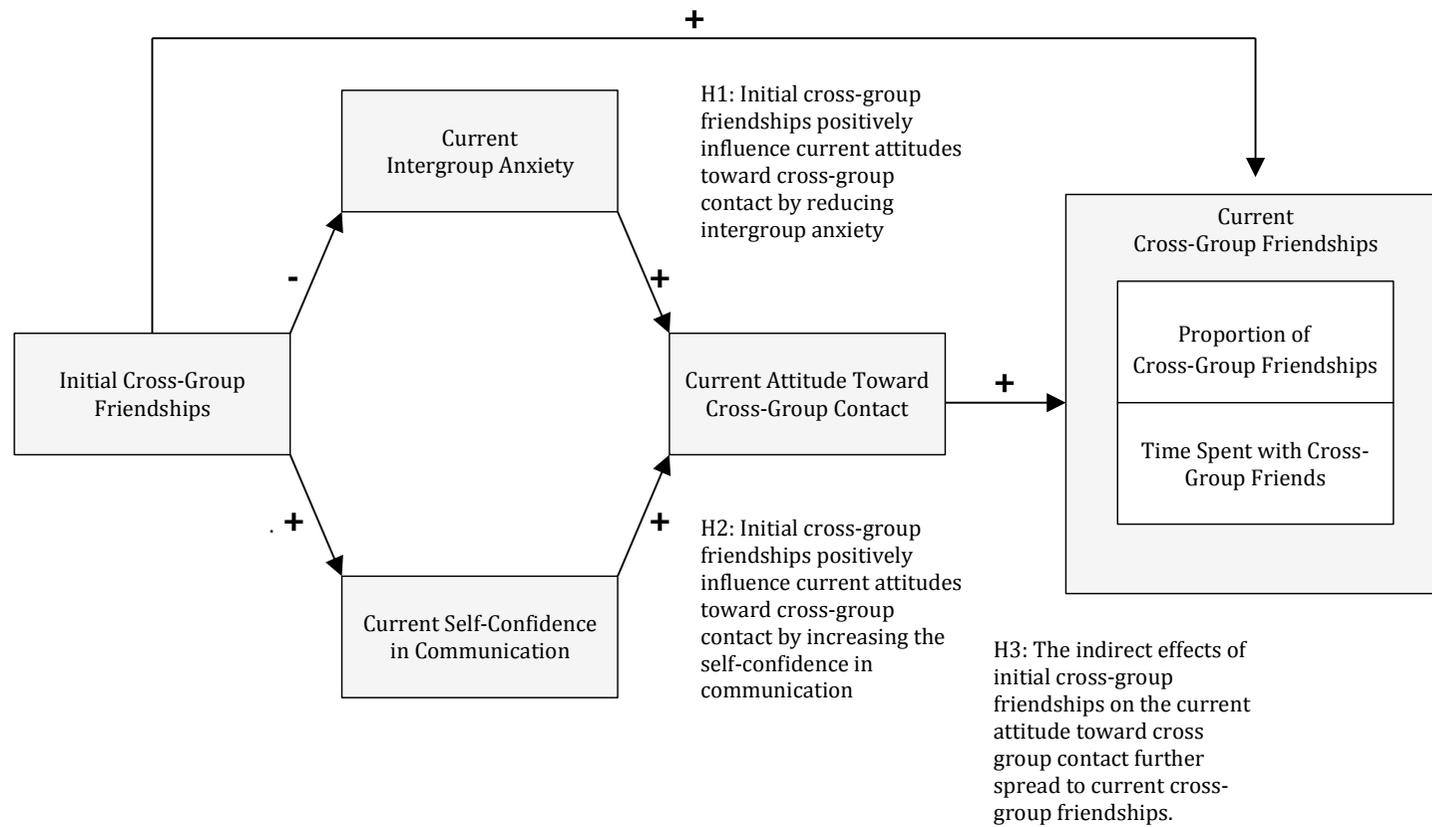


Figure 1. Model displaying the positive influence of initial cross-group friendships on current attitudes toward cross-group contact through a decrease in intergroup anxiety (H1) and an increase in self-confidence in communication (H2). Positive attitudes toward cross-group contact positively influence the number of and the time spent with cross-group friends at present (H3).

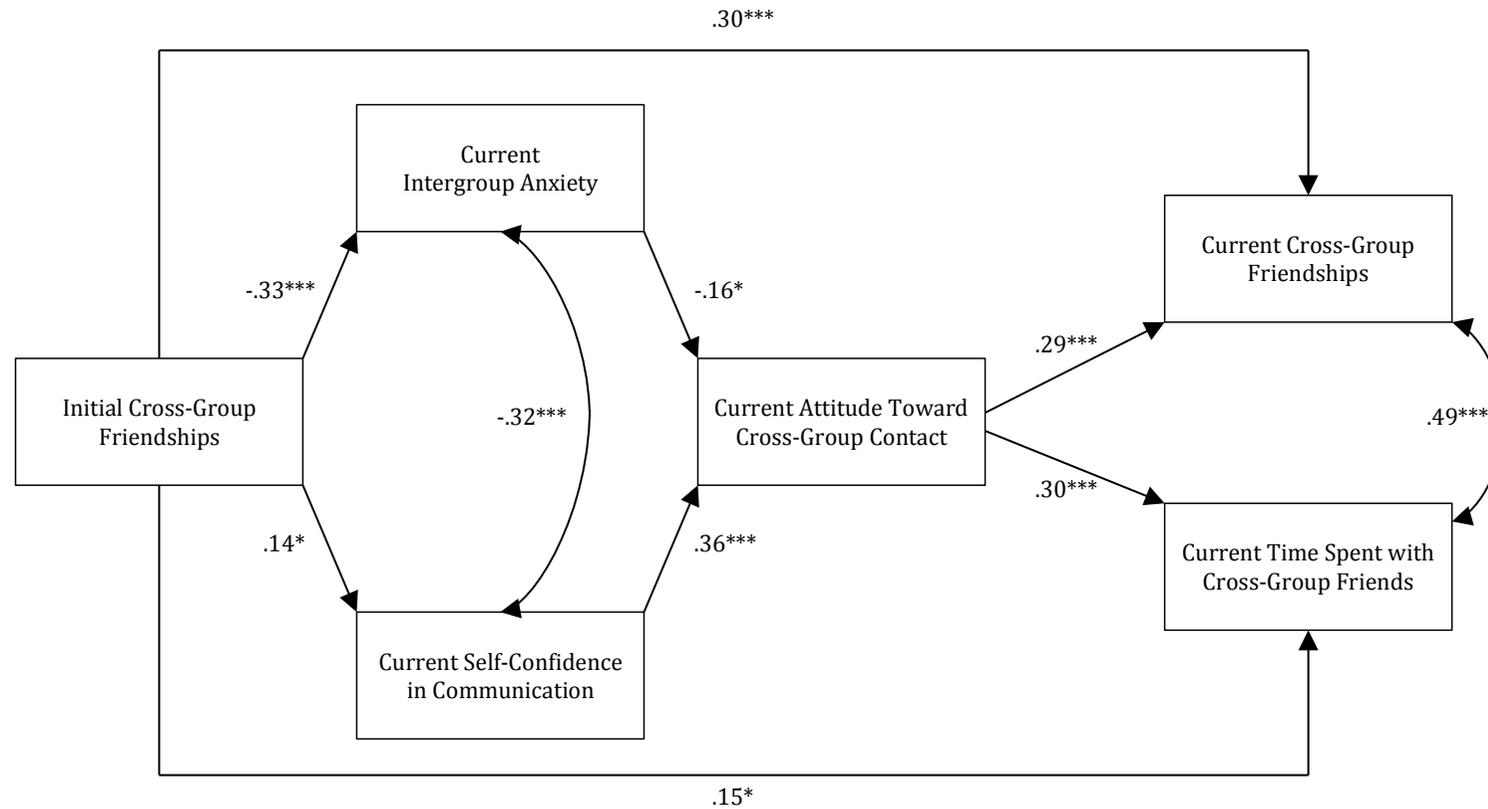


Figure 2. Path model diagram displaying the effect of immigrants' initial cross-group friendships with members of the receiving society on current cross-group friendships and time spent with cross-group friends as mediated by self-confidence in communication, intergroup anxiety, and attitudes towards current cross-group contact. Coefficients are standardized regression weights. * $p < .05$; ** $p < .01$ *** $p < .001$.