

Prejudice reduction through text-based e-contact in Germany

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November 7, 2022

Abstract

Prejudice towards minority groups causes suffering for the individuals affected and targeted by these prejudiced beliefs. According to Allport's (1954) contact hypothesis, misconceptions and stereotypes about a social group are the roots of prejudice. By being in contact with members of an outgroup that misconceptions are held against, these beliefs and stereotypes can be proven wrong. The present thesis aims to examine how text-based e-contact, a low-cost and low-risk alternative to in-person contact, might be used reduce prejudice towards outgroups.

To do so, an experimental study with a between-subjects design was performed. Via an online experiment, a German snowball sample was collected (N = 134). Supporting Allport's contact hypothesis, results showed that participants that interacted with an outgroup member hold less prejudice and intergroup anxiety towards that outgroup than participants that did not have e-contact. Conflicting with that however, there was no significant difference in prejudice found between participants that chatted with an ingroup member to those who chatted with an outgroup member. Nationalism was found to predict an increase in prejudice, while patriotism predicted decreased prejudice. Further, identification with one's ingroup could predict prejudice towards the outgroup. In line with Allport's findings, the more positive the contact was experienced to be, the lower was prejudice.

Implications for future research suggest a need for a shorter prejudice scale that may enable a pre-post design. Research on e-contact should also consider users with low digital literacy and higher age.

Keywords: Contact hypothesis, prejudice, intergroup contact, e-contact

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Prejudiced beliefs are negative attitudes held towards a group, often a minority (Dover et al., 2020). While prejudice describes explicit or implicit negative attitudes, discrimination is the behavioural equivalent, referring to an act of unequal treatment (Dover et al., 2020). History has shown many examples where prejudiced beliefs evolved into discrimination, with accompanying adverse effects for the group or individual being prejudiced (Dover et al., 2020). To this day, prejudice towards minority groups causes suffering for the individuals affected and targeted by these prejudiced beliefs.

Prejudice towards minority groups and concomitant discrimination affects the quality and availability of housing, education, employment, and healthcare for that group. Additionally, prejudice also has drastic effects on the social life and rights of members of marginalised groups and may lead to social exclusion, hatred, or bullying, in turn decreasing self-esteem of affected individuals or groups (Dover et al., 2020). In turn, that can have an effect on their members' physical and psychological health (Dover et al., 2020; World Health Organization, 2021). Systemic prejudice increases the psychological stress experienced by the groups in question, leading to further health effects (Dover et al., 2020; van Bergen et al., 2021).

Despite these negative effects of prejudice, many minority groups are still marginalised or disadvantaged. Still, the development and usage of prejudice does not happen purely out of malicious intention (Tajfel, 1974). Rather, it is humans' need to belong to a group and to sustain their self-esteem, which fosters prejudice (Tajfel, 1974). However, interaction with that prejudiced group showed to enable the obstruction of prejudice beliefs (Allport, 1954). According to Allport (1954), positive contact between the prejudging and the prejudiced group reduces misconceptions by proving them wrong.

The present thesis tests an electronic method of reducing prejudice; text-based e-contact. First, an example of discrimination in Germany is presented to set out the specific context of this study, whereafter research is considered describing how such prejudices develop and sustain. After that, evidence on how intergroup contact can reduce prejudice is given. Finally, it will be discussed how e-contact, a low-cost and low-risk alternative to in-person contact, might be used to reduce prejudice.

Effects of discrimination in Germany

In Germany, Turks are the most discriminated against group (SVR-Forschungsbereich, 2018). Three million people with Turkish background live in Germany, half of which have Turkish citizenship, and half of which are naturalized or only have one parent from Turkey (Luft, 2014). Notwithstanding their naturalization, integration, or assimilation, 54% of Turkish migrants and citizens with Turkish background report racial discrimination in their everyday life (SVR-Forschungsbereich, 2018; Schühler, 2018). Citizens with Turkish background in Germany are more often unemployed and have a lower chance to obtain higher education qualifications and they need to work harder to obtain the same school degree as non-immigrant pupils (Ditton, 2010; Gomolla, 2010; Mediendienst Integration, 2019; OECD, 2015; Schühler, 2018). In addition, the federal labour office (Bundesagentur für Arbeit), discriminates against people with Turkish roots, inhibiting a breakout from this vicious circle (Hemker & Rink, 2017; Wissenschaftszentrum Berlin, 2017). Immigrants and children of immigrants are also confronted with politically motivated violence in Germany, constituting another barrier to wellbeing and integration (Brettfeld & Wetzels, 2007).

This example of Turkish citizens and citizens with Turkish roots in Germany reflects the experience of many minority groups all over the world and shows that prejudiced beliefs need to be acted upon. Since Turks in Germany are a readily accessible population affected by discrimination and prejudice, the present research will focus on this marginalised group

specifically. However, there is no reason to expect that implications of our findings are not applicable for other marginalised groups. By challenging prejudiced beliefs in the general public, negative consequences such as academic obstacles and socioeconomic implications may be avoided, and the situation of prejudiced groups can be improved. To establish a way to do so, the reasons for prejudice beliefs in the general public need to be explored.

Development of prejudice beliefs

The development and usage of prejudice towards minority groups can be partly explained by the way groups interact with each other and process information. In order to make sense of the vast amount of information perceived, humans categorise objects, events, or people in groups on the basis of characteristics they have in common (e.g., Bartlett, 1932). We categorise, because it provides information about the characteristics of people who belong to certain social groups (Jussim et al., 1995), because it helps us to assess the good or bad intentions of people (Fiske et al., 2007), or because we lack the time or motivation to think more thoroughly (Stangor et al., 2022). While this automatic process of social categorization helps reduce complexity, it can also cause stereotypes and prejudice (Allport, 1954; Allport & Kramer, 1946; Tajfel, 1974). Furthermore, these categories may be overgeneralized, or illusory correlations may occur, which are associations of traits or events and a group where in reality no relation exists (Hamilton & Sherman, 1989). Thus, negative personal experiences or gatekeepers such as media and the press may influence evaluations about a category (Campbell, 1967; Hamilton & Gifford, 1976), thereby causing evaluations about groups to be biased. For example, a negative experience with a single lawyer may result in the conclusion that all lawyers are bad. Therefore, processes of categorization might have advantages, but may also be accompanied by bias. That can contribute to the devaluation of whole groups thereby paving the way for prejudice.

As another aspect of social categorization, people also categorise themselves. They define through categorisation who they are, whom they aspire to be, and of what groups they belong to. That is the concept of social identity and influences their evaluations about themselves. However, the evaluations and categorizations of oneself can also be biased.

Self-esteem through social identity

People aim to advance their self-image by increasing self-esteem through social identity (Tajfel, 1974). Social identity refers to the sense a person has about who they are and what groups they belong to, thereby defines the individual in terms of shared attributes with members of a social category (McLeod, 2008; Tajfel, 1974; Turner et al., 1992). By affiliating with positively evaluated groups, self-esteem is enhanced through social identity and thus, our need for favourable self-evaluation motivates us to differentiate between groups (Tajfel, 1974). That leads to processes of social categorization and social comparison; the categorization of people into an ingroup and outgroup and the comparison of oneself with those groups (Festinger, 1954; Tajfel, 1974; Abrams & Hogg, 1999). Since group affiliation is intertwined with self-esteem, people want their ingroup to be more positively viewed than the outgroup, and by differentiating between in- and outgroup, positive distinctiveness can be achieved – being better and different from the outgroup (Cialdini et al., 1976; Tajfel, 1974).

Research on the social identity theory conducted by Tajfel (1974), showed that people prefer members of their social group over outgroup members, which is also known as ingroup favouritism (Iacoviello et al., 2017; Ostrom & Sedikides, 1992). The tendency to prefer one's own group and the resulting self-esteem is stronger, the more a person identifies with their ingroup (De Cremer, 2001; Voci, 2006). Individuals also tend to overestimate the similarities among people they put in the same mental category, known as category accentuation effect (Sherman et al., 2009). Thereby, they may perceive the outgroup as homogenous, members seem more similar to each other than they actually are (Doosje et al., 1999; Iacoviello et al.,

2017; Ostrom & Sedikides, 1992). The ingroup on the other hand is seen as more diverse than the outgroup, because people are observant on the outgroup but active in their ingroup, because they may find information about their group of personal importance since it relates to their own lives, and because they are in frequent contact with their ingroup, making it easier to notice uniqueness and differences (Montrey & Shultz, 2019; Mummendey & Schreiber, 1984). Thus, since the image of the outgroup is heavily based on stereotypes, people see the ingroup as more diverse than the outgroup (Montrey & Shultz, 2019; Mummendey & Schreiber, 1984). Therefore, when approaching an outgroup member, people are more likely to perceive them based on the stereotypes of the group they belong to, rather than as an individual (Ostrom & Sedikides, 1992).

To increase the positive distinctiveness between the highly valued ingroup and the homogeneous outgroup further, groups also tend to base their categories and stereotypes of an outgroup on particularly negative evaluations. By doing so, an oversimplified mental image of the outgroup is created (Tajfel, 1974). That may be done by inferring judgements about outgroup members based on characteristics of their group, but also by generalizing from exemplary members of a group (Doosje et al., 1999). Illusory correlations and other negative attributions without veracity are then transferred to the whole outgroup and incorporated into the mental image of an outgroup member, to contribute to positive distinctiveness, the negative view on the outgroup and ingroup superiority over it (Judd & Park, 1988; Tajfel, 1974; Utsey et al., 2008).

Emotions towards an outgroup

The mental image of the outgroup and attitudes towards it are extended by the processes of relative deprivation and relative gratification. Relative gratification, the feeling that the ingroup is advantaged compared to the outgroup, heightens feelings of superiority (Gatto et al., 2018; Guimond & Dambrun, 2002). The perception that one's ingroup is superior

to the other also abets negative attitudes towards the outgroup (Gatto et al., 2018). Further, the perception that the ingroup possesses a resource the outgroup might want to have, provokes the perception of the outgroup as threat (Gatto et al., 2018). Comparisons of one's ingroup with an outgroup also fosters collective relative deprivation, which is the feeling that the ingroup is at disadvantage compared to the outgroup (Anier et al., 2016; Pettigrew et al., 2008). Especially when a resource is perceived as deserved, hence when the group feels entitled to own a resource, the perception that the ingroup is inferior to an outgroup is accompanied by feelings of resentment that can result in hostility (Olson et al., 1995).

Relative deprivation and gratification can occur at the same time and as a result of these processes of comparison, members fear losing resources that make the ingroup superior, or feel inferior compared to the outgroup (Stephan & Stephan, 1985). The resulting perception of the outgroup as a threat leads to anxiety towards it (Pettigrew, 2016; Pettigrew et al., 2008). These feelings of disadvantage, superiority and anxiety are associated with prejudiced attitudes, due to perceived injustice towards the ingroup (Doosje et al., 2012; Pettigrew, 2016; Pettigrew et al., 2008). Research indicates that following a threat to their group (such as an outgroup that might deprive the ingroup of resources), people identifying highly with that group react more anxiously and derogate the outgroup more than people identifying less with their group (Branscombe & Wann, 1994; Turner, 1999).

Thus, it is noteworthy that the extent to which people believe in the superiority of their ingroup, and the extent to which they prefer it, depends on the extent to which they identify with their group (De Cremer, 2001; Voci, 2006). Therefore, a distinction should be drawn between ingroup identification and ingroup pride (i.e. national pride). National pride involves not only the identification with one's nation (I identify as German) but also the individual feelings of pride directed towards the country (I am proud to be German, I am proud of our history). However, as proposed by De Figueiredo and Elkins (2003), pride in one's nation does not equal the belief in its superiority either. Rather, the belief in the superiority of an

ingroup is distinct from the favourability of that ingroup. In their research, De Figueiredo and Elkins (2003) conceptualised national pride in terms of nationalism and patriotism and found a stronger association between nationalism and prejudice, when considering these concepts separately (De Figueiredo & Elkins, 2003). *Nationalism*, which describes the idealisation of one's nation and the belief in its superiority, is distinct from *patriotism*, which can be described as loyalty and unconditional love and support for one's country (De Figueiredo & Elkins, 2003; Kosterman & Fishback, 1989). Nationalism, therefore, is an ideology that places the importance of one's nation at the centre, while patriotism does not necessarily imply that (De Figueiredo & Elkins, 2003; Hopkins, 2001).

Thus, it can be concluded that people strive for self-esteem, and therefore identify with groups that maintain their self-image or help achieve a self-image. They engage in categorising, and therefore delineate in- and outgroups to compare them. These comparisons result in negative evaluations of the outgroup, as well as positive evaluations of the ingroup. Feelings of deprivation also facilitate negative outgroup evaluations such as the perception of the outgroup as a threat to the ingroup or its resources. These derogating attitudes and the apprehension that the outgroup may endanger the ingroup or resources that advantage them, in turn, may evoke anxiety in the ingroup, thereby also decreasing empathy for the outgroup (Stephan & Finlay, 1999). The extent of identification with a group has been shown to influence the perception of superiority of the ingroup and thereby influences outgroup hostility, intergroup anxiety, empathy, and prejudice.

Challenging Prejudices

Prejudice Reduction Through Contact

Based on the research on the development and persistence of prejudice beliefs, there has been work that attempts to turn these explanations into tools to reduce prejudice.

According to Allport's (1954) contact hypothesis, misconceptions and stereotypes about a

social group are the roots of prejudice. By being in contact with an outgroup that misconceptions are held against, these beliefs and stereotypes can be proven wrong. The rejection of those false beliefs then enables a more positive attitude towards the outgroup that formerly was prejudiced (Allport, 1954). Therefore, according to Allport (1954), the contact between a prejudiced and a prejudging person is essential to obstruct prejudice and develop a more positive attitude.

Contact improves prejudice beliefs, but it does so not only by proving false beliefs wrong. Allport's (1954) conceptualisation of contact states that contact influences two underlying mechanisms that challenge prejudiced beliefs: the reduction of *intergroup anxiety* and an increase in *intergroup empathy* for the outgroup. Research confirms that contact reduces prejudices because it can decrease anxiety felt towards an outgroup (Capozza et al., 2010; Islam & Hewstone, 1993; MacInnis & Page-Gould, 2015; Paolini et al., 2004; Voci & Hewstone, 2003), while increasing empathy for that outgroup (Aberson & Haag, 2007; Capozza et al., 2010; MacInnis & Page-Gould, 2015; Pettigrew, 1997, 1998; Vezzali et al., 2017). By giving opportunity to exchange thoughts and perspectives, contact enables empathy: seeing the world from the perspective of the outgroup. Thereby false beliefs are disproved, and perceived differences are reduced, because feelings and thoughts of the other party can be observed and understood (Stephan & Finlay, 1999; Turner et al., 2007).

Numerous studies support Allport's (1954) contact hypothesis if the contact is positive (e.g., Capozza et al., 2010; Pettigrew & Tropp, 2006; Pettigrew & Tropp, 2008; Velasco González et al., 2008). On the other hand, negative contact increases prejudiced beliefs even more than positive contact can reduce them (Aberson, 2015; Barlow et al., 2012). Therefore, it is vital to ensure the positive valence of the contact. To do so, Allport (1954) proposes four conditions that need to be met for the intergroup contact to be positive. Groups need to have an *equal status* and power, they need to be interdependent to achieve a *common goal*, *cooperate*, and their collaboration needs to be *supported from authorities* relevant to them.

E-contact

In his work, Allport (1954) proposes different types of contact, such as direct (having an outgroup friend) or indirect contact (having an ingroup friend who has an outgroup friend), which have been shown to reduce prejudice (Maunder et al., 2019; Pettigrew et al., 2007; White et al., 2018). Technological advances since the contact hypothesis was first proposed enabled the establishment of another form of contact, electronic contact (e-contact), which describes computer-based interactions (Mulak & Winiewski, 2021; White & Abu-Rayya, 2012; White et al., 2015; White et al., 2018).

Technological innovations allowed e-contact to take different forms, allowing text-based interactions to become an important tool for human interaction. Messenger apps and chats are now one of the most common communication tools; the messenger ‘WhatsApp’ alone reaches one hundred billion messages sent per day (Cathcart, 2020). Beyond its vast usage text-based e-contact also possesses characteristics that can facilitate intergroup contact. Since missing face-to-face interaction and voice also establish a greater sense of anonymity, e-contact offers an opportunity for contact where it was perceived as too threatening before (White et al., 2020). Given that ethnic minorities and outgroups more generally tend to be seen as a threat (Maunder et al., 2019; Van Oudenhoven et al., 1998), feelings of anxiety towards outgroups (Stephan & Stephan, 1985), and the risk of prejudice exacerbating into harsher forms of rejection, such as violence (Allport, 1954), text-based interactions may offer a chance to interact in a more protected environment.

The physical distance and anonymity can lower the anxiety of parties involved, which helps to reduce prejudice (White et al., 2020). Moreover, it also enables people to be frank and self-disclosing (McKenna et al., 2002; Swart et al., 2011-b; White et al., 2020). Increased willingness to share information and be more open positively affects feelings of closeness, which enhances intergroup empathy through giving an insight into thoughts and feelings of outgroup members (McKenna et al., 2002; Turner et al., 2007).

Furthermore, e-contact also offers the opportunity to create positive contact in accordance with Allport's (1954) four conditions. Since researchers may design and refine the chatroom or scenario of the contact, the conditions of equal status, common goal, cooperation, and support from authorities can be easily controlled and incorporated (Maunder et al., 2019). Researchers have been using chatbots and pre-programmed confederates to simulate the interaction with an outgroup member and incorporate the four conditions that way (e.g., Amichai-Hamburger & McKenna, 2006; White et al., 2018; Maunder et al., 2019). These studies found support for the effectiveness of text-based e-contact in reducing the stigmatization of homosexuality, prejudice about mental illnesses, and prejudice between different religious orientations (Amichai-Hamburger & McKenna, 2006; White et al., 2018; Maunder et al., 2019; White & Abu-Rayya, 2012). They showed that the context of the contact can be designed in a way that simulates communication with a group member that is not present, by simulating characteristics that an ingroup perceives as typical for an outgroup.

Aim of the present study

This study tests whether text-based interactions suffice to establish positive contact and thereby reduce racial prejudice. Participants will interact with a researcher, who they believe to be either a German-Turk or a German fellow participant, via an online instant messaging environment. That way, it can be determined whether intergroup contact through text-based e-contact in a racial prejudice domain reduces prejudice.

It is hypothesized that participants who experience e-contact with an assumed outgroup member via instant messaging service will hold fewer prejudice beliefs towards the outgroup, report lower intergroup anxiety, and higher intergroup empathy than participants not having encountered an assumed outgroup member (H1). Since contact is proposed to reduce prejudice by obstructing intergroup anxiety and increasing intergroup empathy, it is predicted that the effect of e-contact with an assumed outgroup member on prejudice beliefs

is stronger the higher the intergroup empathy (mediator) (H2), and that the effect of e-contact with a perceived outgroup member on prejudice beliefs is weaker the higher the intergroup anxiety (mediator) (H3). Finally, the extent to which people identify with their group, perceive it as superior, or prefer it, has been shown to influence prejudice. Therefore, it will be tested in an exploratory fashion, whether ingroup identification and national pride moderate the relationship between e-contact with assumed outgroup members and prejudice reduction. Furthermore, since negative attitudes are most effectively counteracted with positive experiences, the roles of perceived positivity of the contact and perceived media richness are explored as well.

Method

Design

For the present experimental study, a between-subjects design was chosen. Participants were divided into three groups, and exposed to three different conditions, in which they were exposed to e-contact that was provided via a chat function implemented into an online questionnaire. The first group (Group ‘Turkish’) was exposed to e-contact with an interlocutor with a common Turkish name. The second group (Group ‘German’) included e-contact with an interlocutor that is German. A third group (Group ‘no contact’) functioned as control group and did not interact with anyone in a chat. The researcher serves as interlocutor by following a conversation guide, either disclosing German, or Turkish background. Doing so, no real person could be prejudiced or harmed.

The questionnaire and the chat were provided in German to a German sample, since prejudice beliefs towards Turks is an especially concerning topic in Germany. The variables “national pride”, “age”, “gender”, “nationality/migration background”, “educational degree”, and “ingroup identification” were measured before the e-contact. After intergroup contact had

taken place, “prejudice beliefs”, “intergroup empathy”, “intergroup anxiety”, as well as “positivity of the contact” and “media richness” were also assessed.

Sampling and participants

Participants were partly recruited by using a university in-house test subject pool platform, that is exclusive to students of the faculty of Behavioural, Management and Social Sciences of the University of Twente. Further responses were collected by convenience and snowball sampling in West Germany, North-Rhine Westphalia. The inclusion criteria for participants comprised (a) older than 18 years, (b) an existing internet connection for the use of the online questionnaire and chat, (c) German citizenship without a Turkish migration background, and (d) speaking German. Further, ethical approval for the present study was obtained by the Ethics Committee and Examination Board of the University of Twente.

The data was trimmed to remove unfinished responses and participants that misidentified their interlocutor. From group ‘Turkish’, six participants indicating Emre did not have a background of migration and one response from group ‘German’ that reported Jonas to have a background of migration were removed. Two responses from group ‘German’ were removed because participants retracted their informed consent after having read the debrief. After trimming the data, the final data set resulted in a total of 134 responses. Group ‘Turkish’ concluded 36 participants, group ‘German’ 37 participants, and 61 participants were assigned to group ‘no contact’. Responses made at night were automatically assigned to group ‘no contact’, because a researcher had to be online to chat with the participants. As a result, the group ‘no contact’ has more respondents than the contact groups. The mean age of the sample is 30.9 with an age range between 18 and 86 years ($SD_{age} = 12.1$). There were 71 female participants and 61 male participants taking part in the survey, two reported diverse gender identification. All participants reported German nationality, 11 indicated a non-

Turkish background of migration. Most participants indicated either a high school degree (35.1%) or a bachelor's degree (26.9%) as their highest educational degree. Further, most participants indicated that they are employed (50.7%), or students (41.0%) (see Appendix A, Table A1 for detailed description of the sample).

Measures

Demographic data

The first section of the questionnaire requested demographic data. For the age, participants could enter numbers over 18 in a text-entry field, if they are younger than the sampling frame allows, they were forwarded to the end of the survey. In addition, participants were asked about their nationality and migration background. If a Turkish migration background was indicated, or a different nationality than “German” was entered, participants were forwarded to the end of the survey, where they can find an explanation why they could not be included in the sample (see Appendix B). If participants indicated more than one nationality in addition to German, they could fill in the remainder of the survey, but only if the second nationality was not Turkish. Further, participants were asked to disclose their gender, given the option to choose between “male”, “female” or entering their preferred gender designation in a text box. Finally, information about the socio-economic status of the participants was assessed by items requesting information about the highest obtained educational degree and employment.

Ingroup identification

The measure of social identification proposed by Postmes, Haslam, and Jans (2013), has been validated in different cultural contexts and is commonly used in practice (e.g., Bortolini et al., 2018; Reysen et al., 2013; Slater & Barker, 2019). Thus, the extent to which a participant identifies as German was assessed by this single-item measure, namely “I identify

as German”. Participants were asked to answer on a 7-point-Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (7).

A multidimensional measure of ingroup identification was used as well. The German adaptation of the social identification measure (Roth & Mazziotta, 2015) comprises five subscales consisting of three items each, namely group centrality, solidarity, satisfaction, individual self-stereotyping, and ingroup homogeneity. Participants are asked to answer to the items on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5) (see Appendix B). For the present sample, the scale showed good internal consistency ($\alpha = .87$), and a satisfactory KMO-value of .83 indicating adequate sampling, and a significant Bartlett’s sphericity of $p < .001$, suggesting equal variances (see Appendix E, Table E1 for reliability and validity statistics of the scales).

National pride

National pride, consisting of the two dimensions *nationalism* and *patriotism*, has been shown to be positively related to prejudice beliefs. To assess that, a 4-item scale used by Wagner et al. (2012) was used. Two items for each dimension, written as statements (“I am proud to be German (nationalism)”, “I am proud of Germany’s democracy (patriotism)”), are answered by participants on a 4-point Likert scale ranging from *strongly agree* (4) to *strongly disagree* (1). Wagner et al. (2012) validated this four-item measure in a German sample and showed that the two-factorial division of national pride into nationalism and patriotism is appropriate for Germany.

Since the two subscales are constructed from two items, Spearman-Brown statistics are reported for the reliability of the scales (Eisinga et al., 2013). Nationalism scored a KMO-value of .5 which suggests questionable sampling and significant Bartlett’s sphericity ($p < .001$) which indicates equal variances. The subscale patriotism also scores with a KMO-value of .5 and Bartlett’s sphericity of $p < .001$. Spearman-Brown reliability for nationalism is .48,

indicating poor reliability for this subscale. The subscale patriotism exhibits moderate reliability with a Spearman-Brown coefficient of .66 (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Prejudice scale

To measure the prejudice beliefs of participants, the German version of the Racial Argument Scale (RAS-G) by Heitland and Bohner (2011) was applied (see Appendix B for questionnaire). The scale presents the participant positive and negative arguments, in favour and against Turkish citizens in Germany. For example, the argument “It is primarily Turkish adolescents who harass women and whistle after them in public places. In trams and subways as well, foreign teenagers often do not behave appropriately: They are loud and do not respect other passengers.” is presented with the conclusion that “Conclusion: Foreign teenagers are not being raised properly by their parents.”. Participants then needed to evaluate whether the arguments support presented conclusions, and how well they do so on a 7-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (7) (see Appendix B for questionnaire). That structure establishes an ambiguous situation for the participants, that allows them to exert prejudice in a socially acceptable way (Fiske, 1998; Heitland & Bohner, 2011; Saucier & Miller, 2003). Since the RAS-G uses “Muslim” and “Turks” interchangeably, the scale was changed in the present application. “Muslims” was changed into “Turks” in item 6 and 11 since prejudice towards Muslims does not imply general prejudice towards Turks. One item was removed from the scale, because the item cannot be reworded due to religious reference (“It is the obligation of a religious Muslim to proselytize everyone to Islam—either by conviction or by force. Conclusion: Islam should no longer be tolerated in Germany.”). That resulted in a scale of 6 items in favour of Turks, and 7 items against Turks. For the current sample, the scale exhibited good internal consistency ($\alpha = .84$), and a KMO-value of .81

suggesting adequate sampling, and significant Bartlett's sphericity ($p < .001$), indicating equal variances (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Intergroup emotions

Two intergroup emotions are predicted to mediate the effect of e-contact on prejudice beliefs. Intergroup anxiety was measured by the intergroup anxiety scale by Stephan and Stephan (1985) (see Appendix B). A short form of that scale was applied, in order to avoid participant fatigue (Lolliot et al., 2015; Paolini et al., 2004). After an introduction that asks participants to imagine meeting a Turk, participants were asked to indicate, whether and to what extent they felt certain emotions when meeting and interacting with a Turk, namely happy ("glücklich"), awkward ("seltsam"), self-conscious ("unsicher"), confident ("zuversichtlich"), relaxed ("entspannt") and defensive ("defensiv"). The items were answered on a 5-point likert scale, ranging from *not at all* (1) to *extremely* (5) (Paolini et al., 2004). In the current sample, the scale exhibited acceptable internal consistency ($\alpha = .78$), a KMO-value of .78 suggesting good sampling, and significant Bartlett's sphericity ($p < .001$), indicating equal variances (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Intergroup empathy was assessed by a scale of four items, participants could answer on a 5-point Likert scale, ranging from *not at all* (1) to *very much* (5) (see Appendix B). Two of the items, "I think I understand the way Turks see the world" and "I cannot seem to grasp the Turkish perspective on most issues", were derived from the scale on perspective taking by Aberson and Haag (2007). The other two were derived from Capozza, et al. (2013), namely "Do you understand the emotions felt by Turks?" and "Do you feel the same emotions felt by Turks?". The scale yields questionable reliability ($\alpha = .65$), and a KMO-value of .58 indicating mediocre sampling, and significant Bartlett's sphericity ($p < .001$) which shows

equal variances for this variable (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Finally, the General Attitude Towards Turks of the participants towards the outgroup was assessed as well. To do so, the general evaluation scale (Swart et al., 2011-a; Wright et al., 1997) was used (see Appendix B for questionnaire). Again, a short form with four items was applied, to avoid participant fatigue (Lolliot et al., 2015). Participants were asked how they feel about Turks in general and may answer on a bipolar scale ranging from 1 to 5 to the items negative-positive, hostile-friendly, suspicious-trusting, and contempt-respect (Swart et al., 2011-a). The short version of the scale showed good internal consistency ($\alpha = .91$), and a KMO-value of .82, which suggests adequate sampling as well as significant Bartlett's sphericity ($p < .001$) indicating equal variances (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Positivity of the interaction

Contact needs to be positive, to have an effect on prejudice. Thus, to ensure that the interaction was perceived as positive by the participant, the quality of the interaction needed to be assessed. Since they were the only groups having had contact, solely participants from group 'German' and 'Turkish' were asked about the positivity of the contact. That was done by using a segment of the General Intergroup Contact Quantity and Contact Quality Scale (CQCQ) developed by Islam and Hewstone (1993) (see Appendix B). They were asked to disclose on a bipolar scale ranging from 1 to 7, to what extent they experienced the contact as "equal", "involuntary", "superficial", "pleasant" and "competitive". The scale yielded acceptable internal consistency ($\alpha = .77$). In the present sample, the scale exhibited a KMO-value of .75 indicating good sampling, and significant Bartlett's sphericity ($p < .001$) suggesting equal variances (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Quality of the medium

Although e-contact and text-based e-contact seems to be advantageous in relation to intergroup contact, there are also concerns that they might be not as rich as other forms of contact. Therefore, the satisfaction of the participant with this text-based form of e-contact needs to be assessed (Lisiecka et al., 2016). Again, only the two groups having had contact were asked to answer these questions. To measure the perceived media richness, the Media Richness Questionnaire (Suh, 1999) was used, including eight statements to which participants were asked to answer on a 7-point Likert scale, ranging from *strongly agree* (7) to *strongly disagree* (1) (see Appendix B). The two groups having had contact answered items asking for the ease of communication (e.g., “There were ideas I couldn't relate to the other party because of the communication conditions.”), to assesses whether the communication environment was acceptable and easy to navigate. The scale yielded good internal consistency ($\alpha = .80$) and a KMO-value of .74 suggesting good sampling. Further, the significant Bartlett's sphericity ($p < .001$) suggests equal variances (see Appendix E, Table E1 for reliability and validity statistics of the scales).

Procedure

The online questionnaire was created on the platform Qualtrics (www.qualtrics.com). Participants were informed by a briefing that they will take part in a survey on national pride and work-life balance, and that they will interact via a text-based instant messenger with a partner that signed up for the same time slot. Before taking part in the survey, participants consented to the conditions of the study and so were informed about the confidential treatment of their participation, that the study takes 30-45 minutes, and that they are free to withdraw from the study at any time. After consenting, participants were asked to answer the first part of the survey, including scales for age, gender, nationality/migration background, educational degree, ingroup identity, and national pride (see Appendix B). Participants were

then randomly assigned to one of three different experimental conditions, group 'German' or group 'Turkish', or group 'no contact'.

Subsequently, group 'German' and 'Turkish' were forwarded to the chat segment of the questionnaire, implemented through "chatplat" (www.chatplat.com). Participants in group 'no contact' did not engage in a chat and were directed to the second part of the survey. Above the chat window, the cooperative task the participant and alleged confederate needed to work on was described, which was about advice for a healthy work-life balance (see Appendix B for task description in the questionnaire). This and similar tasks were effective in reducing prejudice in intergroup contact before (e.g., Bagci et al., 2021; Boccanfuso et al., 2021; White et al., 2019-a, -b). In the chat window (see Appendix B for questionnaire with chat window), they were able to interact with the researcher, who they were led to believe was a random participant. The conversations were the same, except the confederates' names were different in the two groups - in group 'Turkish' it was Emre, in group 'German' it was Jonas. Since Emre is a common Turkish name, also in Germany (CNN Türk, 2022), this name should clearly indicate a Turkish background while Jonas does not. Although participants are forwarded to the next section after 15 minutes, participant and researcher were informed they could end the conversation earlier, if they agreed they cannot find more task related ideas. A conversation guide was used to ensure that the conversations are consistent across participants and groups. It contained forms of greetings, tips for work-life balance, and possible closing statements (see Appendix C, for conversation guide and Appendix D for example chat). It was followed as a guide in a manner that allows the participant to believe the conversation was natural. By using the statements as ideas only content wise and tying them into the conversation as needed, the chats could be natural but relatively consistent while being positive to align with Allport's conditions to positive contact. The conversation guide entails prepared response options for the researcher, for each conversation to start with a welcoming statement, continue with solutions for the task, and guides the researcher in ending the

conversation in the same manner for every participant. After the chat, participants from group ‘German’ and ‘Turkish’ were asked whether they thought their confederate had a background of migration. That was done as manipulation check, to see whether they recognized the alleged in- or outgroup member as such.

The next section of the survey, which all three groups filled out, measured prejudiced beliefs, intergroup emotions, and national pride. Additionally, the two groups that had intergroup contact answered items for media richness, and positivity of the contact (see Appendix B for questionnaire). Afterwards, a short debrief was shown, presenting more information about the true nature of the study, and disclosing why the participant was deceived. As part of the debrief, a final consent was requested to ensure the participants were still willing to contribute data despite the deception. Contact details for the researcher were given in case they had questions. If participants wanted to receive the final report, they could also provide their email address.

Data analysis

The Statistical Package for Social Sciences (SPSS) for Windows, Version 27.0 was used for analysis. That application was used for general descriptive statistics, frequencies and internal consistency ratings from the sample and the scale created, as well as running statistical models. Additionally, the version 4.1 of the macro PROCESS (Hayes, 2018) was used for mediation and moderation analysis.

First, in order to assess the relations of the variables measured, a Pearson r correlation was conducted. To test whether either of the groups had a higher or lower level of prejudice, intergroup anxiety, and intergroup empathy (hypothesis 1), the means of the groups ‘Turkish’, ‘German’ and ‘no contact’ are compared using One-Way ANOVAs. Since it is of interest whether group ‘Turkish’ has significantly different levels of prejudice, anxiety, and empathy,

planned contrasts are done with ‘Turkish’ as reference group comparing them with ‘German’ and then again with group ‘no contact’. By using group ‘Turkish’ as the reference group, the assumed to be lowest prejudice score can be used as baseline and compared with the two groups expected to be higher in prejudice. After that, post hoc comparisons compare group ‘German’ with ‘no contact’, to understand the effect contact with an ingroup member may have while controlling for family-wise error rates.

To test whether intergroup empathy or intergroup anxiety mediate the effect of being exposed to either group on prejudice (hypothesis 2 and 3), Model 4 from the PROCESS macro for SPSS was used. To do so, the groups (‘Turkish’, ‘German’, ‘no contact’) are set as the independent variable and were dummy coded so that pairwise comparisons can be done with group ‘Turkish’ as reference group. For hypothesis 2, intergroup empathy was set as a mediation variable, and prejudice as the dependent variable. In a separate model, intergroup anxiety was used as the mediation variable, and prejudice as the dependent variable to test hypothesis 3.

Finally, it will be tested in separate models whether ingroup identification, national pride, positivity of the contact, and media richness moderate the relationship between e-contact with presumed outgroup members and prejudice reduction in an exploratory manner. Using model 2 from the PROCESS macro for SPSS, the groups are set as independent variable, ingroup identification, national pride, positivity of the contact and media richness as moderator variables, and prejudice as dependent variable.

Results

Descriptive Statistics

Mean scores were calculated for each variable, the scores can be found in Table 1. All variables were tested for normal distribution. On the scales measuring *prejudice*, *ingroup*

identification, intergroup empathy, national pride, and media richness, responses seemed normally distributed (see Appendix F, Figure F1-F8). The histograms of the variables *intergroup anxiety, general attitude towards Turks, and contact positivity* gave reason to think the data is not normally distributed, since they did not appear bell-shaped or symmetric. Further analysis resulted in Q-Q plots with trend following data, clustered around the expected normal (see Appendix F, Figure F9-F11). Therefore, all variables are assumed to be normally distributed.

Item mean scores were relatively low, in most cases they are below the midpoint. Considering prejudice to range from 1 to 7, intergroup anxiety from 1 to 5, patriotism and nationalism from 1 to 4, it can be said that the sample showed relatively low prejudice, intergroup anxiety, patriotism, and nationalism, as can also be seen in Table 1. When leaving out three responses that were found to be complete but seemed that participants left the debrief page open after finishing, it took participants $M_{\text{minutes}} = 21.71$ minutes on average to take part in the study ($SD_{\text{minutes}} = 14.92$). Since group ‘no contact’ had less items to answer and no chat to take part in, the average response time in the contact groups was higher. That is, group ‘Turkish’ took $M_{\text{Turkish}} = 29.17$ minutes on average ($SD_{\text{Turkish}} = 6.05$), group ‘German’ took $M_{\text{German}} = 24.3$ minutes on average ($SD_{\text{German}} = 11.4$), and participants in group ‘no contact’ took $M_{\text{no contact}} = 15.7$ on average ($SD_{\text{no contact}} = 13.88$). The average length of the e-contact was 11 minutes ($SD = 3.15$). In group ‘Turkish’ that was an average of $M = 11.9$ ($SD = 2.95$), and in group ‘German’ it was $M = 10.73$ ($SD = 3.27$). That being said, the chat was ended 27 times before the 15-minute time limit in group ‘Turkish’ (75%) and 29 times in group ‘German’ (78.4%).

In the manipulation check 26 participants indicated they identified Emre as outgroup member and 10 said they were not sure. In group ‘German’ 19 participants indicated they identified Jonas as ingroup member and 18 said they could not tell (see Appendix G, Table G1 for frequencies of responses to manipulation check).

Pearson's correlation coefficients were used to estimate bivariate relationships which are presented in Table 1. The strongest positive correlations were found between ingroup identification and prejudice ($r(132) = .40, p < .01$), intergroup anxiety and prejudice ($r(132) = .31, p < .01$), intergroup empathy and the general attitude towards Turks ($r(132) = .31, p < .01$), and between national pride and ingroup identification ($r(132) = .59, p < .01$). Further, there was a statistically significant association between media richness and contact positivity ($r(71) = .50, p < .01$). Statistically significant negative correlations could be found between intergroup empathy and prejudice ($r(132) = -.35, p < .01$), intergroup empathy and anxiety ($r(132) = -.38, p < .01$), general attitude toward Turks and intergroup anxiety ($r(132) = -.43, p < .01$), between contact positivity and prejudice ($r(71) = -.45, p < .01$), and between contact positivity and intergroup anxiety ($r(71) = -.34, p < .01$).

Table 1. Item mean scores and Pearson r correlations between independent, dependent, and confounding variables.

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	a.	b.	9.
1. Age	30.1	12.1	-										
2. Prejudice	3.1	0.9	.24**	-									
3. Ingroup Identification	3.0	0.6	.10	.40**	-								
4. Ingroup Identification (single item measure)	4.3	0.8	-.07	.24**	.49**	-							
5. Intergroup Anxiety	2.1	0.6	.07	.31**	.06	.25**	-						
6. Intergroup Empathy	2.9	0.7	-.14	-.35**	-.09	-.23**	-.38**	-					
7. General Attitude Towards Turks	5.4	1.3	.05	-.26**	-.02	-.15	-.43**	.30**	-				
8. National Pride	2.5	0.5	.12	.22*	.59**	.45**	.00	-.16	-.08	-			
a. Nationalism	2.0	0.7	.05	.40**	.57**	.43**	.02	-.12	-.10	.81**	-		
b. Patriotism	2.9	0.6	.14	-.06	.38**	.29**	-.02	-.14	-.03	.80**	.28**	-	
9. Contact Positivity	5.5	1.0	-.21	-.45**	-.06	-.20	-.34**	.25*	.16	-.03	-.14	.11	-
10. Media Richness	4.4	0.9	-.07	-.11	.15	.13	-.21	.12	.14	.25*	.04	.37**	.50**

Note. ** $p < .01$. significant at the 0.01 level. * $p < .05$. significant at the 0.05 level.

Inferential Statistics

Group differences in prejudice beliefs and intergroup emotions

To test whether participants who experienced text-based e-contact with an assumed outgroup member hold fewer prejudice beliefs towards said outgroup and whether their anxiety is lower while empathy is heightened, a One-Way ANOVA with planned contrasts and post hoc tests was performed. For the planned contrasts, group ‘Turkish’ is used as reference group and is compared to the other groups. Post hoc tests were done for the comparisons not part of the hypotheses, in order to account for family-wise error.

Levene’s test of homogeneity of variances was statistically non-significant for prejudice ($p = .25$) and anxiety ($p = .22$), indicating that the variances between the groups in these two variables are approximately equal. For intergroup empathy on the other hand, Levene’s was statistically significant ($p = .048$), suggesting that the variances between the groups are significantly different, which violates the assumption of homogeneity of variance. Since the sample sizes of the three groups are unequal and variances on this variable are heterogenous, Welch statistics are reported for intergroup empathy.

Results show that group ‘Turkish’ ($M = 2.78$, $SD = .90$), group ‘German’ ($M = 3.00$, $SD = .79$) and group ‘no contact’ ($M = 3.27$, $SD = .90$) differed in their average prejudice, $F(2, 131) = 3.60$, $p = .03$. Contrasting group ‘Turkish’ with group ‘German’, the difference was not statistically significant ($p = .29$). When comparing group ‘Turkish’ with group ‘no contact’, prejudice differed significantly ($p = .01$). Additionally, post hoc comparisons using Tukey HSD adjustment showed that there was not significantly less prejudice in group ‘German’ than in group ‘no contact’ ($p = .31$).

Intergroup anxiety also differed significantly between the groups Turk ($M = 1.88$, $SD = .64$), German ($M = 2.28$, $SD = .55$) and group 'no contact' ($M = 2.06$, $SD = .58$), $F(2, 131) = 4.14$, $p = .02$. Planned contrasts between the groups show that intergroup anxiety was significantly lower in group 'Turkish' compared to group 'German' ($p < .01$). Contrasting group 'Turkish' with group 'no contact' showed no statistically significant difference in intergroup anxiety ($p = .15$). Post hoc comparisons using Tukey HSD adjustment indicated that the difference between group 'German' and group 'no contact' was statistically non-significant ($p = .18$).

Since intergroup empathy exhibited unequal variances, Welch statistics are reported. There was no significant effect of the group participants were in on their intergroup empathy towards Turks, $F(2, 77.98) = 0.56$, $p = .58$. The planned contrasts between the groups show that intergroup empathy was not significantly different in group 'Turkish' ($M = 2.97$, $SD = .78$), than it was in group 'German' ($M = 2.83$, $SD = .55$), $p = .41$. Neither was it significantly different when contrasting group 'Turkish' with group 'no contact' ($M = 2.80$, $SD = .72$), $p = .26$. Due to the unequal variances, post hoc comparisons were done using Games-Howell adjustment. They indicated that the difference in empathy between group 'German' and group 'no contact' was statistically non-significant ($p = .97$).

To sum up, significant differences in prejudice were observed between group 'Turkish' and group 'no contact'. Further, intergroup anxiety differed significantly between the groups 'Turkish' and 'German'. No significant differences in intergroup empathy were observed between the groups. Since prejudice and intergroup emotion differences were also expected between group 'Turkish' and 'German', hypothesis 1 must be partially rejected.

The mediating effect of intergroup empathy

To test whether intergroup empathy is mediating the effect of e-contact on prejudice, a mediation analysis was performed using PROCESS' model 4. The analysis includes prejudice as outcome variable, chat group as predictor variable and empathy as mediator variable. Since the predictor variable containing the groups is multicategorical, it was dummy coded so that pairwise comparisons can be done. Therefore, group 'Turkish' is considered as reference group and is compared with group 'German' first. After that, group 'Turkish' is contrasted with group 'no contact' (see Figure 1).

A significant regression equation was found ($F(3, 130) = 8.31, p < .001$), with an R^2 of .16. When comparing group 'Turkish' with group 'German' (see Figure 1, X_1), the total effect between experiment condition and prejudice was not found to be significant ($\beta = 2.83, t(131) = 1.06, p = .29$). The effect of experiment condition on empathy (path a) ($\beta = -.54, t(130) = -0.82, p = .41$) was not found to be significantly different between these two groups either. Further, the direct effect of experiment condition on prejudice (path c') did not turn out significant ($\beta = 2.08, t(131) = 0.82, p = .41$). Finally, the indirect effect was tested using bootstrapping procedures. 5000 bootstrapped samples were used, and the indirect effect of empathy (path a * path b) turned out statistically non-significant, suggesting that no mediation occurred, since the confidence interval included zero [$X_1 = .75, SE = .92, 95\% CI (-1.01, 2.71)$].

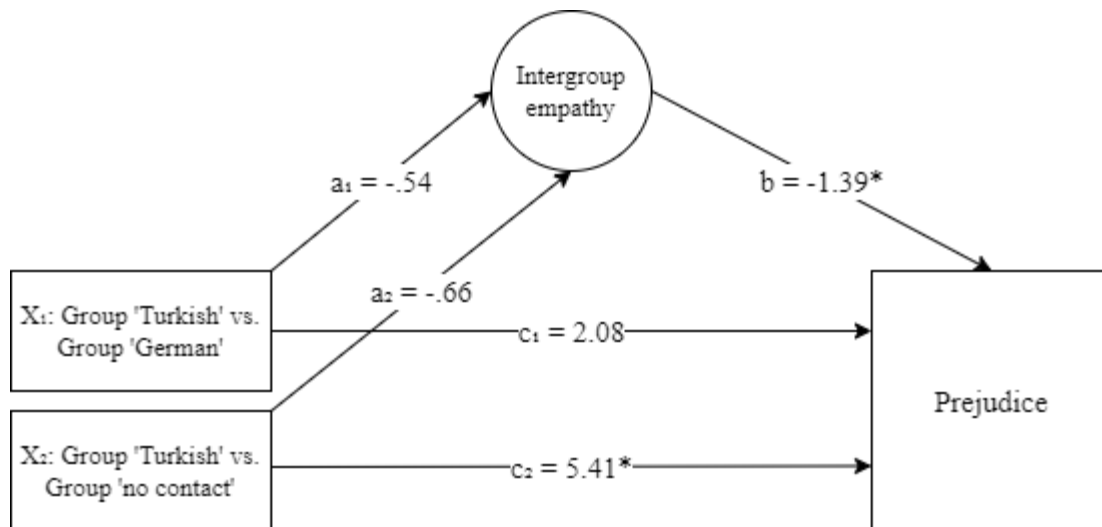
Comparing group 'Turkish' with group 'no contact' (see Figure 1, X_2), the total effect between the experiment condition and prejudice was significant ($\beta = 6.33, t(131) = 2.63, p = .01$). Even though a greater difference in empathy between group 'Turkish' and group 'no contact' was observed, results do not show a statistically significant effect of the groups on empathy (path a) ($\beta = -.66, t(131) = -1.14, p = .26$). The direct effect of experiment condition on

prejudice (path c') was significant ($\beta = 5.41$, $t(130) = 2.37$, $p = .02$). Again, 5000 bootstrapped samples were used to test the indirect effect of empathy (path $a * \text{path } b$), which suggested that the difference in empathy between these two groups was not significantly mediating the effect of the groups on prejudice [$X_2 = .93$, $SE = .94$, 95% CI (-.89, 2.9)].

Thus, based on the results from the mediation analysis, no mediation of intergroup empathy of experiment condition and prejudice was observed in this sample. Therefore, hypothesis 2 must be rejected.

Figure 1

Visual representation of the mediation analysis for hypothesis 2 and resulting coefficients per path.



Note. $*p < .05$. significant at the 0.05 level.

The mediating effect of intergroup anxiety

Testing whether intergroup anxiety mediates the effect of e-contact on prejudice in the present sample, another mediation analysis was performed with PROCESS. Prejudice was considered the outcome variable, the chat groups as predictor variable and intergroup anxiety was set as mediator variable.

A significant regression equation was found ($F(3, 130) = 7.21, p < .01$), with an R^2 of .14. For the two groups 'Turkish' and 'German' (see Figure 2, X_1). The effect of experiment condition on anxiety (path a) was statistically significant ($\beta = 2.37, t(131) = 2.87, p < .01$). The direct effect (path c') of contact group on prejudice was not significant for the difference between group 'Turkish' and German ($\beta = .46, t(130) = 0.17, p = .86$). To test the significance of the indirect effect of anxiety (path a * path b), 5000 bootstrapped samples were used. The indirect effect was statistically significant since the confidence interval excludes zero [$X_1 = 2.38, SE = 1.05, 95\% CI (.59, 4.68)$]. In accordance with Zhao and colleagues (2010), this constitutes for an indirect-only mediation.

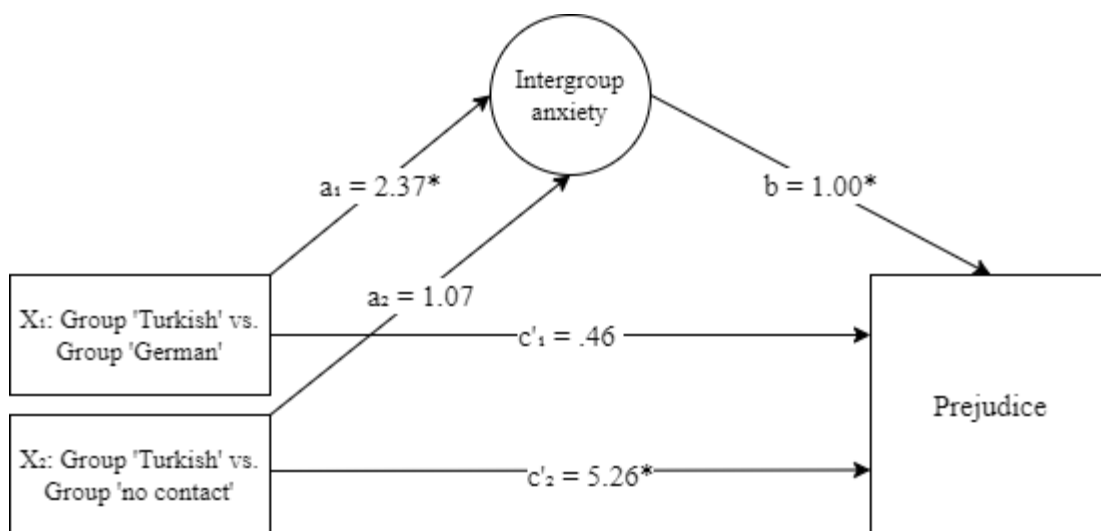
Comparing group 'Turkish' with group 'no contact' (see Figure 2, X_2), results do not show a statistically significant difference between the groups for path a ($\beta = 1.07, t(131) = 1.44, p = .15$). The direct effect of the group participants were in on their prejudice (path c') ($\beta = 5.26, t(130) = 2.27, p = .02$) was statistically significant. Finally, the indirect effect of anxiety (path a * path b) between group 'Turkish' and group 'no contact' was not significant and did not mediate the effect of the groups on prejudice [$X_2 = 1.07, SE = .81, 95\% CI (-.51, 2.71)$].

Considering these results, it can be said that intergroup anxiety indirectly mediates the effect of experiment group on prejudice when comparing group 'Turkish' and group 'German'. However, no mediation effect of intergroup anxiety could be identified in the relationship of

group 'Turkish' and group 'no contact' with prejudice. Thus, hypothesis 3 can be partially accepted.

Figure 2

Visual representation of the mediation analysis for hypothesis 3 and resulting coefficients per path.



Note. * $p < .05$. significant at the 0.05 level.

Exploratory analyses

To test whether ingroup identification, national pride, positivity of the contact, and media richness moderate the relationship between e-contact and prejudice, moderation analyses were performed using PROCESS' model 1 and 2. The outcome variable for the analyses is prejudice and the predictor are the groups, which were dummy coded in a variable to enable pairwise comparisons. Thus, for the analyses of ingroup identification and national pride, group 'Turkish'

is compared with group ‘German’ first and ‘Turkish’ is then again compared with group ‘no contact’.

Reviewing the results of the moderation analysis considering ingroup identification as the interaction term, the overall model was significant and exhibits an R-squared of .22 ($F(5, 128) = 7.11, p < .01$). However, the interaction effect of ingroup identity on the relationship between the e-contact groups and prejudice was not significant, neither when comparing group ‘Turkish’ with group ‘German’ ($\beta = -.11, p = .70$), nor when comparing group ‘Turkish’ with group ‘no contact’ ($\beta = -.30, p = .26$). The main effect of ingroup identity on prejudice was statistically significant and positive ($\beta = .71, p < .01$), indicating that higher ingroup identification increased prejudice in the present sample all together.

Since the Pearson correlation showed opposing correlations of patriotism with prejudice and nationalism with prejudice, and because Wagner et al. (2012) suggested national pride to be bifactorial, a multiple regression was run to predict prejudice from patriotism and nationalism. A significant regression equation was found $F(2, 131) = 15.17, p < .01$, with an R^2 of .19 (see Table 2). Participants nationalism significantly predicted an increase in prejudice ($\beta = .45, p < .01$), whereas patriotism significantly predicted decreased prejudice ($\beta = -.18, p = .03$).

Table 2. Regression table for the analysis of nationalism and patriotism predicting prejudice.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R ²
	B	Std. Error	Beta			
(Constant)	33.75	4.70		7.18	.00**	.19
Nationalism	4.03	.74	.45	5.46	.00**	
Patriotism	-1.69	.76	-.18	-2.22	.03**	

a. Dependent Variable: Prejudice

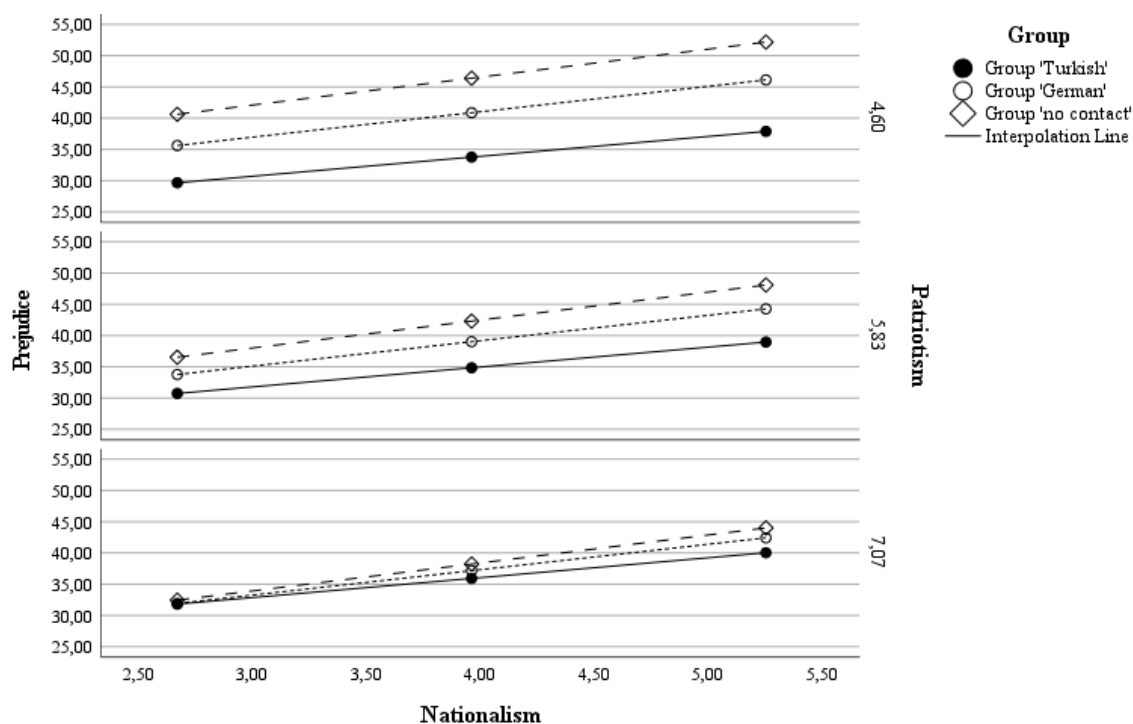
Note. ** $p < .01$. significant at the 0.01 level (1-tailed). * $p < .05$. significant at the 0.05 level 1-tailed).

It was therefore also tested whether patriotism and nationalism moderate the relationship between the groups on prejudice using PROCESS' model 2 for a double moderation. The results of the analysis including two moderators indicates a good fit of the model ($R^2 = .28$, $F(8, 125) = 6.16$, $p < .01$). After adding the groups as main effect, the main effect of nationalism remains significant ($\beta = 3.52$, $p = .01$), while the main effect of patriotism does not ($\beta = 1.40$, $p = .36$). Comparing group 'Turkish' with group 'German', the interaction effect of nationalism is not significant ($\beta = .55$, $p = .77$) neither is the interaction effect of patriotism ($\beta = -2.90$, $p = .17$). For group 'Turkish' vs group 'no contact', the interaction effect of nationalism was not significant either ($\beta = 1.02$, $p = .56$), but the interaction effect of patriotism was significantly decreasing prejudice ($\beta = -4.35$, $p = .02$). That being said, patriotism seems to dampen the effect nationalism and groups have on prejudice. The higher patriotism, the less important the influence of nationalism on prejudice, and the more similar are prejudice scores between the groups (see Figure 3 for graph showing this effect).

Another moderation analysis considering positivity of the contact as the interaction term was run. The overall model was significant and exhibits an R-squared of .22, ($F(3, 69) = 6.46$, $p < .01$). The interaction effect of positivity of the contact on the relationship between the e-contact groups and prejudice was not significant ($\beta = .50$, $p = .31$). The main effect of contact positivity on prejudice was statistically significant and negative ($\beta = -1.23$, $p < .01$), indicating that the perception of the contact to be positive decreased prejudice in the present sample.

Figure 3

Interaction effect of nationalism and patriotism on the relationship between experiment group and prejudice.



Reviewing the results of the moderation analysis considering media richness as confounding variable, the overall model was non-significant ($R^2 = .03$, $F(3,69) = 0.81$, $p = .50$). Neither the interaction effect of media richness on the relationship between the e-contact groups and prejudice was significant ($\beta = .25$, $p = .47$), nor was the main effect of media richness on prejudice ($\beta = -.26$, $p = .27$). This result suggests that the perception of text-based chat as suitable medium to interact, did not significantly influence prejudice in the present sample.

Finally, a linear regression was run to test the relationship of prejudice and age of the participants. A significant regression equation was found $F(1, 132) = 8.45$, $p < .01$, with an R^2 of .06 (see Table 3). Participants age significantly predicted an increase in prejudice ($\beta = .25$, $p <$

.01). Considering the three groups separately in this context, age could predict prejudice in group ‘Turkish’, $F(1, 34) = 7.35, p = .01; \beta = .42, p = .01$. This was not the case for group ‘German’, where no significant regression equation was found, $F(1, 35) = 0.93, p = .34$. Age could not predict prejudice in this group ($\beta = .16, p = .34$). Finally, there was no significant regression equation found for the effect of age on prejudice in group ‘no contact’, $F(1, 59) = 3.02, p = .09; \beta = .22, p = .09$. Considering the scatterplot of prejudice scores per age and group (see Figure 3), it becomes apparent that the significant effect found for group ‘Turkish’ might rely on an outlier in this group. After outliers from group ‘no contact’ and ‘Turkish’ have been removed, another regression $F(1, 130) = 3.80, p = .053$ (see Table 6) shows that the effect of age on prejudice barely remains statistically significant ($\beta = .17, p = .053$) (see Appendix H, Figure H1 for scatterplot of prejudice by age without outliers).

Table 3. Regression table for the analyses of age predicting prejudice.

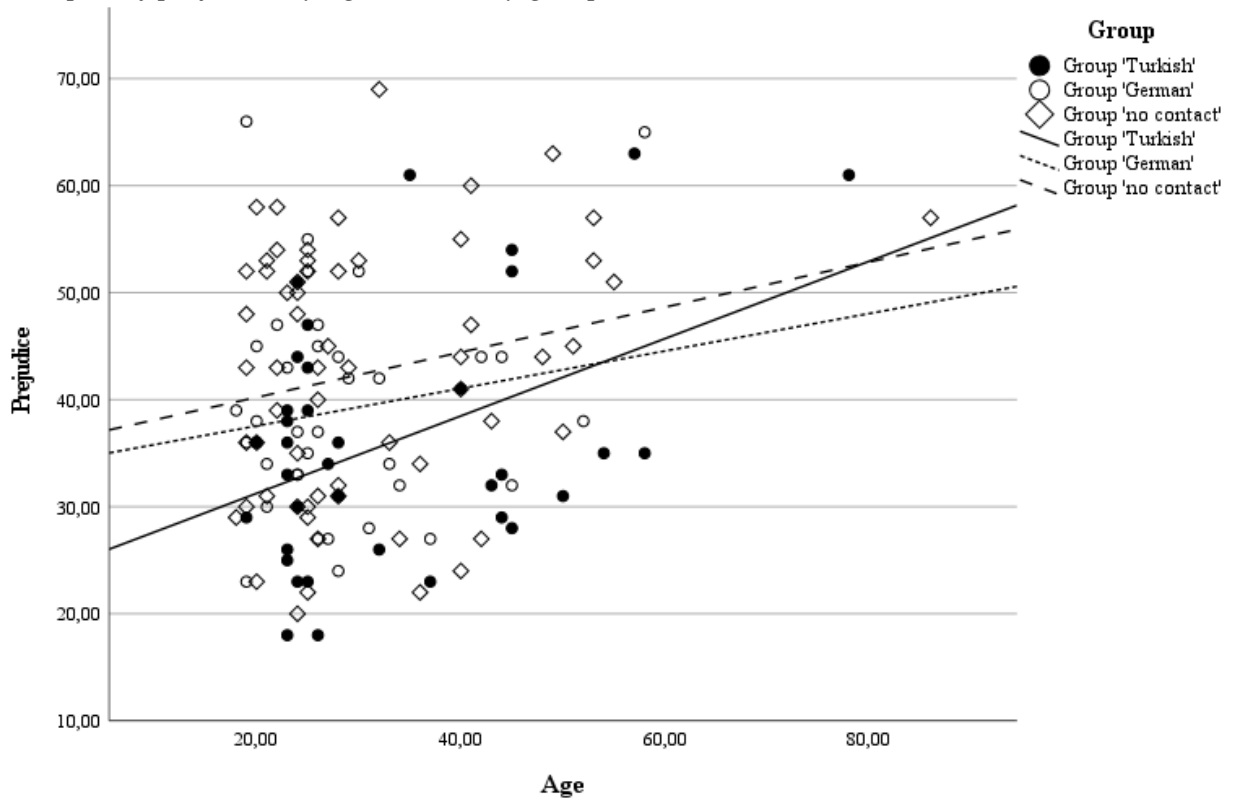
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R ²
	B	Std. Error	Beta			
(Constant)	32.57	2.69		12.10	.00**	
Age	.24	.08	.25	2.91	.00**	.06
Age without outliers	.19	.10	.17	1.95	.053	.03

a. Dependent Variable: Prejudice

Note. ** $p < .01$. significant at the 0.01 level (1-tailed). * $p < .05$. significant at the 0.05 level 1-tailed).

Figure 3

Scatterplot of prejudice by age, divided by groups.



Discussion

This study aimed to investigate whether text-based e-contact with an assumed outgroup member may reduce prejudice towards that outgroup. It was also tested how intergroup emotions, identification with and pride in one's own group, and the perceived positivity of the contact, as well as perceived media richness influence this effect.

Participants' level of prejudice was affected by the group they were exposed to. The group that did not encounter a text-based chat at all showed significantly more prejudice than the group which interacted with an assumed outgroup member did. However, this difference was also expected between the two groups that had contact. Intergroup anxiety on the other hand was found to be significantly lower when having contact with an outgroup member than it was when interacting with an ingroup member, while it was not significantly different to the group without e-contact. None of the groups differed significantly in terms of their intergroup empathy. Hypothesis 1, that participants interacting with an outgroup member hold fewer prejudice beliefs, report lower intergroup anxiety and higher intergroup empathy than the other two groups, therefore was partially supported. Further, intergroup empathy did not mediate the effect of groups on prejudice. Hypothesis 2, which states that intergroup empathy mediates the effect of e-contact on prejudice, therefore must be rejected. Finally, intergroup anxiety was found to indirectly mediate the effect of contact groups on prejudice, but not between group Turkish and no contact. Thus, hypothesis 3, that intergroup anxiety mediates the effect of e-contact on prejudice, can be partially accepted.

Exploratory analyses resulted in support of the assumption that German ingroup identification may predict prejudice towards Turks. Further in line with Allport's (1954) findings, the extent to which the contact was perceived as positive could predict prejudice in the

present sample, although not moderating the effect of e-contact. The perception of text-based e-contact as a rich medium did not influence the effect of the contact on prejudice.

Group differences in prejudice beliefs

In accordance with Allport's (1954) contact hypothesis, the group that received text-based e-contact with an alleged outgroup member showed lower prejudice beliefs towards that outgroup than a group that did not engage in text-based e-contact. Thus, the results are generally in support of Allport's (1954) contact hypothesis because the group interacting with an alleged outgroup member showed significantly less prejudice than the group that did not have any contact. However, there did not seem to be a meaningful difference between participants that interacted with an alleged outgroup member and participants that interacted with an ingroup member. It remains unclear why no significant difference between the two groups interacting with either an ingroup or outgroup member could be found. The results raise the question whether the group membership of the interlocutor was crucial in decreasing prejudice, or whether e-contact per se did so. For instance, research on minimal social interactions suggests that positive interactions with strangers increase well-being and positive affect (e.g., Gunaydin et al., 2020; Sandstorm & Dunn, 2014-a,-b). As Van Lange and Columbus (2021) show, interacting with strangers increases people's happiness, because an interaction may bring exposure to new perspectives, novel events, amusement, or excitement, which makes the interaction interesting (Lewandowski & Aron, 2004; Van Lange & Columbus, 2021). Moreover, happiness has been found to decrease dogmatism, which is the unacceptance or rejection of others' beliefs, ideas, and behaviours (Malmir et al., 2017). From that follows that prejudice might have been

decreased in both contact groups due to the mere interaction with a stranger increasing affect and/or open mindedness.

However, the lower prejudice score in the group interacting with an ingroup member compared to group 'no contact' might also be explained by the lack of experienced e-contact. Since participants in the contact groups self-disclosed and most mentioned their first name while introducing themselves, participants that did not have contact may have felt more anonymous compared to the groups with e-contact (Wang, 2017). If that is the case, the difference between the group talking to an ingroup member and group 'no contact' might be due to social desirability bias, which is the tendency to underreport socially unacceptable attitudes and overreport accepted attitudes (Edwards, 1953). Anonymity decreases participants tendency to respond in a socially desirable way (Nederhof, 1985), and because the anonymity of participants can be assumed to be decreased when they disclose details about themselves in the chat room, increased social desirability bias can be expected in the contact groups (Joinson, 1999). As Krumpal (2014) notes, especially in questionnaires about sensitive topics such as racism or other antisocial attitudes, social desirability bias may skew the results. That supports the effect of e-contact, given that notwithstanding possible social desirability bias, the effect observed between the group interacting with an outgroup member and group 'no contact' goes beyond the effect between the group interacting with an ingroup member and 'no contact'.

Group differences and mediation effects of intergroup emotions

Contact with an outgroup member was hypothesised to reduce prejudice by lowering anxiety and heightening empathy towards that outgroup. In general, established literature on intergroup contact (e.g., Hutchison & Rosenthal, 2011; Swart et al., 2011-b; Turner et al., 2007; Turner et al., 2013) shows that intergroup anxiety mediates the relationship of any kind of

contact on prejudice or does so at least for the majority group (Binder et al., 2009). Intergroup anxiety was indeed lower for the group communicating with an outgroup member, and intergroup anxiety indirectly mediated the effect of contact groups on prejudice. This suggests, when comparing the groups that interacted with an ingroup and outgroup member, contact could lower prejudice by indirectly affecting intergroup anxiety. On the other hand, intergroup anxiety did not mediate the effect of no contact on prejudice. Further, it is surprising to see that people that interacted with an alleged Turkish person were not significantly less anxious than group ‘no contact’, and intergroup anxiety was highest in the group interacting with an ingroup member.

It is unclear why these group differences exist, but the interaction with ingroup members may have reinforced intergroup anxiety, as the higher anxiety mean score in the group interacting with an ingroup member suggests. By interacting with the ingroup, the identification with the ingroup could have been made salient (e.g., Randolph-Seng et al., 2012; Voci & Hewstone, 2003). In turn, that heightened ingroup identification may increase anxiety towards other groups (Stephan, 2014). Based on the present study however, this proposed explanation cannot be tested, since ingroup identification was measured before participants interacted with the in- or outgroup member. Yet it is noteworthy, that ingroup identification correlated significantly with intergroup anxiety, as the Pearson correlation matrix suggests (see Table 1).

Similarly, none of the results suggested intergroup empathy to differ between the groups, nor did it mediate the effect of e-contact on prejudice in the present sample. This also opposes established approaches to prejudice in literature (e.g., Aberson & Haag, 2007; Capozza et al., 2010; MacInnis & Page-Gould, 2015; Pettigrew, 1997, 1998; Vezzali et al., 2017). While empathy builds on exchanging thoughts and perspectives, the used method of contact could have hindered participants from developing empathy for the outgroup. Since e-contact does not enable

face-to-face contact in the same physical space, it might miss the multisensory impressions made about an outgroup (Keating, 2020). Humans use non-verbal cues and body language to interpret the emotions of their counterparts, as well as establish trust and confirm understanding (Balvin & Conley Tyler, 2006; Bergiel et al., 2008). Missing that feedback, the interaction may foster misunderstandings (Harwood, 2010), and cues the face provides and that are required for empathy may be missed (Cole, 2001). Although participants reported satisfaction with the richness of the medium it remains unclear whether this minimal contact sufficed to evoke the ability to recognize and understand feelings of the outgroup. As Swart and colleagues (2011-b) define, intergroup empathy describes seeing and understanding the world from someone else's view. The task at hand did not require perspective taking which may have inhibited empathy to emerge further. Moreover, according to Todd and colleagues (2015), too high anxiety can inhibit perspective taking. Therefore, it may be the case that participants did not take their interlocutors perspective due to too high anxiety or perceived threat through the outgroup, or because the medium used did not facilitate perspective taking enough.

National pride, media richness and age

In the present sample, national pride could predict prejudice. Participants with higher nationalism show increased prejudice, and participants with higher levels of patriotism record decreased prejudice. While the effect of nationalism on prejudice was observed in several studies (e.g., Becker et al., 2007; De Figueiredo & Elkins, 2003; Heinrich, 2018), the negative effect of patriotism on prejudice is less obvious. Nationalism, which describes the belief in the superiority of one's own nation, increases prejudice (De Figueiredo & Elkins, 2003). Patriotism is defined as a positive attitude towards achievements of one's nation, political participation, social welfare,

democracy, and society. Given this conceptualization, it becomes clear that the concept is not related to ethnic identity like nationalism, but a democratic and social sense of pride (Cohrs et al., 2004; Heinrich, 2018). As Becker and colleagues (2007) conclude, patriotism has a decreasing effect on prejudice because people high on patriotism respect democratic values. Wagner and colleagues (2012) would later conclude that patriotism does not reduce prejudice, but that this democracy appreciative subcomponent does. This goes hand in hand with the present results, which suggest that patriotism weakens the effect nationalism exerts on prejudice.

The perceived media richness of the text-based e-contact applied did not influence the effect of e-contact on prejudice in the present sample. Contrary to expectations, the perception of the chat as suitable did not significantly change the effect the contact had on prejudice. However, it must be said that participants rated the chat relatively high in richness. Further, the high usage of text-based communication and instant messaging since the private use of the internet might have accustomed people to expressing themselves in that environment (Hilbert & López, 2011).

Moreover, age was found to significantly predict prejudice. Other scholars had similar results, suggesting that older adults will show increased prejudice due to their decreased ability to inhibit prejudice beliefs (e.g., Pettigrew, 2006, 2008; Von Hippel et al., 2000). However, the present findings might also be due to a too small and unrepresentative sample. Older participants reported difficulties with online surveys and text-based online communication in general. Difficulties included chats to be closed mid-conversation, skipping of the chat segment by accident or misunderstanding of the user interface, and slow response rates that caused some conversations to be laconic or not taking place. Since responses with missing data or chat were excluded from the sample, the sample is likely to be misrepresenting older adults and users with little computer skills. Additionally, potential participants of higher ages frequently mentioned

that they did not feel addressed by the work-life balance related premise of the study, since they were on pension.

Limitations and Future Research

Despite the support of Allport's (1954) contact hypothesis found in the present results especially concerning the effect of contact and differences in intergroup emotions, some seem to be incongruent with existing literature.

For instance, group means of prejudice, anxiety and empathy showed mostly equal variances, and all the effects were observed in the expected direction. However, contrary to expectations, not all of the effects observed were significant. Differences between present results and existing literature and lack of statistical power may be attributable to a too small sample size. The contact groups had fewer participants than group 'no contact' did. Due to the length of the questionnaire especially when including 15 minutes of conversation with a stranger, participants in the contact groups frequently aborted the survey, and keeping participants' attention could not be ensured. Future research should consider splitting surveys or measuring less variables, to reduce the strain on participants and to increase response rates.

The Racial Argument Scale was chosen to measure prejudice because it is said to be relatively robust against social desirability bias while also measuring subtle prejudice (Heitland & Bohner, 2011). While robustness to bias needs to be considered especially when measuring such sensitive topics as racism, this scale also lengthened the questionnaire further. Due to the nature of the items, participants also needed to read often long arguments, straining their attention. Therefore, a pre-post-test design was not appropriate, which is why it is uncertain to what extent prior knowledge on the outgroup skewed the effect of contact. Participants

frequently reported that they felt they could not answer the scale honestly, since some questions seemed leading or wrongful to answer in the way they would have liked to answer. It is therefore unclear whether latent prejudice was actually measured as intended by the scale, since participants seemed to have identified items aimed at measuring contemporary prejudice as obvious and blatant prejudice. Further, social desirability bias might have been in effect since participants could have expected that a researcher observes them, or that their conversations will be analysed. However, even if social desirability bias had influenced the results, differences in prejudice could be observed, nonetheless. Therefore, it is for future research to see whether clearer, significant differences between the variables exist in this context, even if social desirability bias is controlled for or different measures for prejudice are used.

Moreover, although all the effects were observed in the expected direction, there were non-significant differences in prejudice between some of the groups, with surprisingly no significant differences being found between the group interacting with an ingroup and the one with an outgroup member. Therefore, it needs to be investigated whether e-contact with any person lowers prejudice through mere interaction with a stranger, or whether the alleged nationality of the interlocutor actually matters. To understand the difference in prejudice between the groups, measuring the mood of participants might be necessary. That way, it may be tested whether the observed effect was reduced prejudice, or whether the interaction with any person, independent of their group membership, can decrease prejudice by increasing happiness. Furthermore, it might be necessary to investigate whether the differences between the groups can be explained by prior prejudice beliefs, or prior intergroup contact that influenced participants' prejudice beliefs.

Given the results from manipulation check, which suggest that almost one quarter of participants that interacted with an outgroup member indicated they were not sure whether their confederate was a migrant, it needs to be questioned whether participants identified their interlocutor as outgroup member. As Kaiser and Wilkins (2010) show, minimal information suffices for majority groups to identify minority groups and thereby make prejudice prominent. On the other hand, they also found that majorities react with more prejudice towards minorities that identify highly with their group themselves. Making “Emre’s” outgroup identification more salient therefore either could have contributed to decrease of prejudice, but also could have increased prejudice. Therefore, future research needs to examine whether it is of advantage to accentuate the outgroup membership of the alleged outgroup member by disclosing that membership explicitly. Different levels of outgroup membership may be disclosed (e.g., prototypical name vs. “In my home country, ...”), to find the most effective level of outgroup membership disclosure. While doing so, a way needs to be found to check if participants considered the interlocutor an outgroup member without releasing the true nature of the study.

Further, due to the increased intergroup anxiety in the group that interacted with an ingroup member, it needs to be investigated whether interaction with an ingroup member increases intergroup anxiety compared to not communicating with neither ingroup nor outgroup member. More generally, it needs to be tested whether this minimal contact suffices to provoke empathy. Therefore, it would be of advantage to provide instructions to participants that ensure perspective taking, as Vanman (2016) suggests. That can enable participants’ perspective taking.

Finally, present results suggest a linear relationship of age and prejudice, which is generally in support of other research done in this area. Given that people of higher ages are at higher risk to hold prejudice (or are less able to inhibit prejudice), there should be special

attention to this group in future research. For instance, a different task other than the work-life balance task should be used, to also address people on pension or without employment. Additionally, e-contact should also be tested and optimised for users with low digital literacy. Lastly, it might be interesting to see whether the length of the chat, who ends the chat, or the number of suggestions mentioned by the participant influences how the contact is perceived.

Conclusion

By analysing prejudice and intergroup emotions, this thesis has shown that e-contact improves prejudice towards an outgroup. E-contact positively affected prejudice when the contact was experienced with an interlocutor assumed to be from an outgroup. Contact with an assumed outgroup member reduced intergroup anxiety, compared to contact with an ingroup member, but it did not affect intergroup empathy. Intergroup anxiety indirectly mediated the effect e-contact had on prejudice, but intergroup empathy did not mediate the relationship between the groups and prejudice. The present findings imply opportunities of e-contact to reduce racial prejudice, but also a need for research in measuring prejudice while accounting for social desirability bias, prior intergroup contact, and prior prejudice beliefs. Nonetheless, present findings deliver insights into how prejudice towards marginalised groups can be obstructed by creating interventions that incorporate e-contact as safe and cheap alternative to real life intergroup contact.

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Appendices

Appendix A

Table A1. Description of the sample.

	Category	N	%
Gender	Female	71	53.0
	Male	61	45.5
	Other	2	1.5
Educational Degree	Higher education entrance qualification (Abitur)	47	35.1
	Intermediate secondary school certificate	8	6.0
	High school diploma	4	3.0
	Bachelor's degree	36	26.9
	Master's degree	14	10.4
	Doctorate	1	.7
	Apprenticeship (Geselle/Bachelor)	22	16.4
	Apprenticeship (Meister/Master)	2	1.5
Employment	Student	55	41.0
	Without employment	5	3.7
	Employed	68	50.7
	Self-employed	4	3.0
	Public servant	2	1.5
Background of migration	None	123	91.8
	Other, non-Turkish	11	8.2

Appendix B

BlockRandomizer: 1 - Evenly Present Elements

EmbeddedData
 Condition = 1
 EmbeddedData
 Condition = 2
 EmbeddedData
 Condition = 3

Block: Briefing (1 Question)
 Standard: Demographics (8 Questions)

Branch: New Branch
 If
 If Welche Staatsbürgerschaft/-en haben Sie? Türkisch Is Selected
 Or Haben Sie einen Migrationshintergrund? Türkischer Migrationshintergrund Is Selected

Standard: End of survey, not target group (1 Question)

Standard: Social Identification (Roth & Mazziotta, 2015) (16 Questions)

Branch: New Branch
 If
 If Condition Is Equal to 1

Standard: Chat task description (1 Question)
 Standard: Chatroom group Turkish (1 Question)
 Standard: Manipulation check (1 Question)

Branch: New Branch
 If
 If Condition Is Equal to 2

Standard: Chat task description (1 Question)
 Standard: Chatroom group German (1 Question)
 Standard: Manipulation check (1 Question)

Standard: Racial Argument Scale (Heitland & Bohner, 2011) (13 Questions)
 Standard: Shortform intergroup anxiety (Paolini et al., 2004) (1 Question)
 Standard: Intergroup empathy; Aberson and Haag (2007)/Capozza, et al. (2013) (1 Question)
 Standard: General attitude (Swart et al., 2011; Wright et al., 1997) (1 Question)
 Standard: National pride (Wagner et al., 2012) (1 Question)

Branch: New Branch
 If
 If Condition Is Equal to 3

Standard: Debriefing Control Group (3) (3 Questions)

EndSurvey:

Standard: Positivity of the contact (Islam & Hewstone, 1993) (1 Question)

Standard: Media richness scale (Suh, 1999) (1 Question)

Branch: New Branch

If

If Condition Is Equal to 1

Standard: Debriefing group Turkish (1) (3 Questions)

EndSurvey:

Branch: New Branch

If

If Condition Is Equal to 2

Standard: Debriefing group German (2) (3 Questions)

EndSurvey:

Start of Block: Briefing

In dieser Studie werden Faktoren im Zusammenhang mit Nationalstolz und Work-Life Balance in Deutschland untersucht. Wenn Sie sich zur Teilnahme bereit erklären, werden Sie zunächst gebeten Fragen zu Ihrer Meinung und Einstellung zu beantworten. Danach werden Sie mit einem anderen, zufällig ausgewählten Teilnehmer verbunden der mit Ihnen über die Vereinbarkeit von Beruf und Privatleben, und Möglichkeiten zur Freizeitgestaltung diskutieren wird. Schließlich endet die Umfrage mit einem weiteren kurzen Frage-Segment. Es steht Ihnen frei, Ihre Teilnahme jederzeit abzubrechen ohne dass Ihnen dadurch Nachteile entstehen. Nach Beendigung Ihrer Teilnahme erhalten Sie weitere Informationen über die Studie, und wenn Sie es wünschen kann Ihnen der Abschlussbericht zugeschickt werden. Die gesamte Umfrage dauert etwa 25-30 Minuten.

Es werden keine persönlich identifizierbaren Informationen gesammelt, sodass Ihre Antwort nicht zu Ihnen zurückverfolgt werden kann. Diese anonymen Daten werden mindestens 10 Jahre lang aufbewahrt.

Diese Forschungsstudie wird von Nell Royal im Rahmen einer MSc-Arbeit durchgeführt. Der Projektleiter ist Dr. Steven Watson, Abteilung für Psychologie, Konflikt, Risiko und Sicherheit, Universität Twente. Wenn Sie Fragen oder Bedenken bezüglich Ihrer Teilnahme an dieser Studie haben, können Sie Nell per E-Mail kontaktieren: n.royal@student.utwente.nl.

Indem Sie unten auf "Ja, ich stimme zu" klicken, geben Sie an, dass Sie Ihre Rolle in dieser Studie verstanden haben und mit der Teilnahme an dieser Studie einverstanden sind.

P.S.: Diese Umfrage enthält einen Code für SurveySwap und SurveyCircle
 Ja, ich stimme zu. Nein, Teilnahme abbrechen.

This study examines factors related to national pride and the work-life balance in Germany. If you agree to participate, you first will be asked to answer survey questions that ask about your opinion and attitude. After that, you will be connected with another, random participant that will discuss work-life balance, and leisure time activities with you. Finally, the survey ends with another short segment of questions. You are free to discontinue your participation at any time without penalty. You will be given additional information about the study after your participation is complete, and if you want to, the final report can be sent to you. If you agree to participate in the study, it may take up approximately 25-30 minutes to complete the survey and task with the second participant. No personally identifiable information will be collected, so that your response cannot be traced back to you. This anonymous data will for at least 10 years.

This research study is being conducted by Nell Royal as part of an MSc thesis. The project supervisor is Dr. Steven Watson, Department of Psychology, Conflict, Risk and Safety, University of Twente. If you have questions or concerns about your participation in this study, you may contact Nell via e-mail n.royal@student.utwente.nl.

By clicking “Yes, I Agree” below, you are indicating that you have understood your role in this research, and consent to participate in this research study. Do you agree with the conditions of participation mentioned above?

Yes, I agree. No, cancel participation.

End of Block: Briefing

Start of Block: Demographics

Wie alt sind Sie?

How old are you?

Welches Endgerät nutzen Sie, um diese Umfrage auszufüllen?

- Tablet, Android iPad Mac Laptop/PC, Windows
 Handy, Android iPhone
 Anderes, nämlich: _____

What device are you using to complete this survey?

- Tablet, Android iPad Mac Laptop/PC, Windows
 Handy, Android iPhone
 Other: _____
-

Welche Staatsbürgerschaft/-en haben Sie?

- Deutsch Türkisch Niederländisch
 Andere, nämlich: _____

What citizenships do you have?

- German Turkish Dutch
 Others: _____
-

Haben Sie einen Migrationshintergrund?

- Nein Türkischer Migrationshintergrund
 Niederländischer Migrationshintergrund Anderer, nämlich:

Do you have a migration background?

- No Turkish migration background
 Dutch migration background Other:
-

Ich identifiziere mich als Deutscher.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I identify as German.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Welchen Geschlechts sind Sie?

- Weiblich Männlich _____

What is your gender?

- Female Male type... _____
-

Bitte nennen Sie Ihren höchsten erreichten Bildungsabschluss.

- Fachhochschul- oder Hochschulreife (Abitur)
- Mittlerer Schulabschluss (Realschule oder vergleichbar)
- Hauptschulabschluss
- Bachelor
- Master
- PhD
- Abgeschlossene Berufsausbildung/Geselle
- Abgeschlossene Berufsausbildung/Meister

Please indicate your highest obtained education degree.

- Higher education entrance qualification (Abitur)
 - Intermediate secondary school certificate
 - High school diploma
 - Bachelor's degree
 - Master's degree
 - PhD
 - Apprenticeship (Geselle/Bachelor)
 - Apprenticeship (Meister/Master)
-

Bitte nennen Sie Ihren derzeitigen Berufsstand.

- Studierend
- Ohne Beschäftigung
- Angestellt
- Selbstständig
- Verbeamtet

Please indicate your current employment.

- Student
- Unemployed
- Employed
- Self-employed
- Public servant

End of Block: Demographics

Start of Block: End of survey, not target group

Vielen Dank, für Ihre Teilnahme! In Deutschland leben drei Millionen Menschen mit türkischem Hintergrund. Trotz ihrer Integration und Einbürgerung berichten mehr als die Hälfte von ihnen, in Deutschland diskriminiert zu werden. Oft sind türkische Mitbürger in Bezug auf Arbeit und Bildung benachteiligt, was auf Vorurteilen in der Bevölkerung in Deutschland beruht. Um dieser Ungleichbehandlung entgegenzuwirken, war das Ziel dieser Studie herauszufinden, ob der

digitale Kontakt zu einer türkischen Person und die gemeinsame Bearbeitung einer Aufgabe Vorurteile abbauen kann.

Da Sie einen türkischen Migrationshintergrund oder eine türkische Staatsbürgerschaft angegeben haben, können wir Ihre Teilnahme leider nicht werten. Wir gehen davon aus, dass Menschen mit türkischen Wurzeln keine Vorurteile gegenüber anderen Menschen mit türkischer Abstammung hegen. Wir bitten um Ihr Verständnis.

Sollten Sie Fragen oder Anmerkungen haben, wenden Sie sich bitte an Nell Royal:
n.royal@student.utwente.nl

Thank you for your participation!

Three million people with a Turkish background live in Germany. Despite their integration and naturalization, more than half of them report being discriminated against in Germany. Turkish fellow citizens are often disadvantaged in terms of work and education, which is based on prejudices in the population in Germany. In order to counteract this unequal treatment, the aim of this study was to find out whether digital contact with a Turkish person and working on a task together can break down prejudices.

Unfortunately, we cannot evaluate your participation, since you have indicated a Turkish migration background or Turkish citizenship. We assume that people with Turkish roots are not prejudiced against other people with Turkish roots. We ask for your understanding. If you have any questions or comments concerning this study, please contact Nell Royal:
n.royal@student.utwente.nl

End of Block: End of survey, not target group

Start of Block: Social Identification (Roth & Mazziotta, 2015)

Bitte antworten Sie so ehrlich wie möglich, inwiefern die Aussagen auf Sie zutreffen.
Please answer as truthful as possible to what extent the statements apply to you.

Ich denke oft an die Tatsache, dass ich Deutsch bin.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I often think about the fact that I am German.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Die Tatsache, dass ich Deutsch bin, ist ein wichtiger Teil meiner Identität.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

The fact that I am German is an important part of my identity.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Deutsch zu sein ist ein wichtiger Teil dessen, wie ich mich selbst sehe.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

Being German is an important part of how I see myself.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich fühle mich mit Deutschen verbunden.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I feel a bond with Germans.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich empfinde Solidarität mit Deutschen.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I feel solidarity with Germans.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich fühle mich in das, was Deutsche betrifft, involviert.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I feel committed to Germans.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich bin froh, dass ich Deutsch bin.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I am glad to be German.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich finde es angenehm, Deutsch zu sein.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

It is pleasant to be German.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Es gibt mir ein gutes Gefühl, Deutsch zu sein.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

Being German gives me a good feeling.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich habe viele Gemeinsamkeiten mit einer/m typischen Deutschen.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I have a lot in common with the average German person.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich ähnele einer/m typischen Deutschen sehr.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I am similar to the average German person.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Ich bin ein/e typische/r Deutsche/r.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

I am a typical German.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Deutsche haben viele Gemeinsamkeiten miteinander.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

German people have a lot in common with each other.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Deutsche ähneln sich einander sehr.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

German people are very similar to each other.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree
-

Deutsche teilen viele gemeinsame Eigenschaften.

- Stimme überhaupt nicht zu Stimme nicht zu
 Stimme weder zu, noch lehne ich ab Stimme zu
 Stimme voll und ganz zu

Germans share a lot of the same characteristics.

- Strongly disagree Disagree
 Neither agree nor disagree Agree
 Strongly agree

End of Block: Social Identification (Roth & Mazziotta, 2015)

Start of Block: Chat task description

Wenn Sie gleich auf den Pfeil unten Rechts drücken, werden Sie mit einem zufälligen Teilnehmer dieser Studie verbunden.

Sobald Ihr Partner den Chatroom betreten hat, werden Sie mit ihm chatten können. **Bitte stellen Sie sich einander kurz vor (bleiben Sie so anonym wie Sie es möchten), und sammeln Sie dann gemeinsam Ideen, die dabei helfen sollen eine ausgeglichene Work-Life Balance zu erreichen.**

Work-Life Balance kann sich hierbei auf Studenten, Voll- und Teilzeit arbeitende, und alle Menschen beziehen. Letzlich strebt jeder Mensch ein ausgewogenes Verhältnis zwischen beruflichen Anforderungen und privaten Bedürfnissen an. Das Ziel sind Tipps für zur Balance von, Karriere (Beruf, Erfolg), und Selbstverwirklichung (Familie, Liebe).

Sobald Sie und Ihr Partner denken, Sie haben keine neuen Ideen mehr, können Sie auf den Pfeil unten Rechts klicken. Über den Pfeil werden Sie zum zweiten und wichtigsten Teil der Umfrage weitergeleitet. Der Chat wird nach spätestens 15 Minuten geschlossen.

When clicking the arrow below, you will be connected with a random participant of this study. Once your partner has entered the chat room, you will be able to chat with them. Please

introduce yourselves briefly (remain as anonymous as you wish), and then brainstorm ideas together to help achieve work-life balance.

Work-life balance can refer to students, full- and part-time workers, and all people. Ultimately, everyone strives for a balance between professional demands and private needs. The goal is to provide tips for balancing career (work, success), and self-fulfilment (family, love).

As soon as you and your partner think you have no more new ideas, you can click on the arrow at the bottom right. The arrow will take you to the second and most important part of the survey. The chat will close after 15 minutes at the latest.

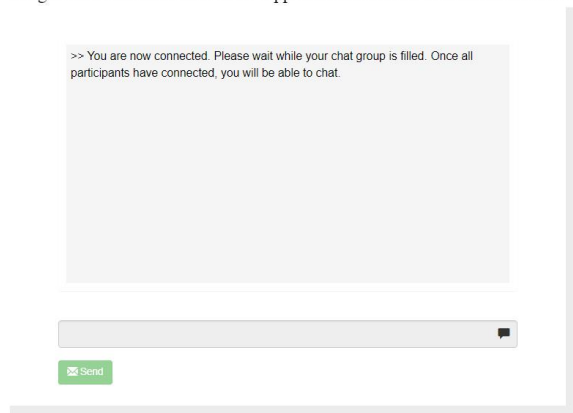
End of Block: Chat task description

Start of Block: Chatroom group Turkish

Aufgabe: Sammeln Sie Ideen und Tipps für eine bessere Work-Life-Balance.



Aufgabe: Sammeln Sie Ideen und Tipps für eine bessere Work-Life-Balance.



Task: Collect ideas and tips for a better work-life balance.

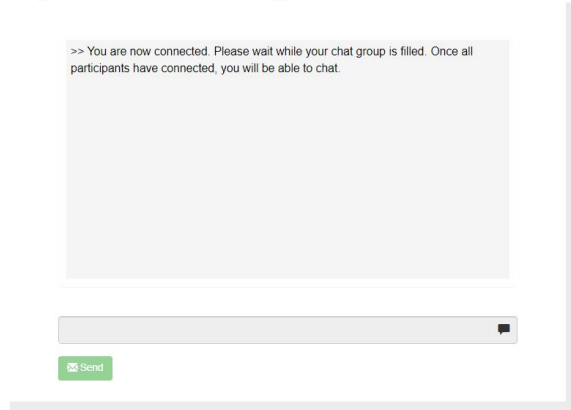
End of Block: Chatroom group Turkish

Start of Block: Chatroom group German

Aufgabe: Sammeln Sie Ideen und Tipps für eine bessere Work-Life-Balance.



Aufgabe: Sammeln Sie Ideen und Tipps für eine bessere Work-Life-Balance.



Task: Collect ideas and tips for a better work-life balance.

End of Block: Chatroom group German

Start of Block: Manipulation check

Denken Sie, dass Ihr Gesprächspartner einen Migrationshintergrund hat, oder gab es Hinweise darauf?

Nein Ja Das wurde nicht deutlich

Did your partner have a background of migration?

No Yes Did not become clear

End of Block: Manipulation check

Start of Block: Racial Argument Scale (Heitland & Bohner, 2011)

Der Unterricht an deutschen Schulen ist sehr stark begrenzt: An weiterführenden Schulen werden meistens nur die Sprachen "Englisch", "Spanisch" und "Französisch" angeboten. Auch PISA hat

diesbezüglich zu keinen Änderungen geführt. Um auch die Bedürfnisse der türkischen Mitbürger in Deutschland zu beachten, sollte ebenfalls Türkisch-Unterricht an Schulen angeboten werden. Schlussfolgerung: Diese Ausweitung des Angebots stellt auch für deutsche Kinder eine Bereicherung dar.

- Stimme überhaupt nicht zu
- Stimme eher nicht zu
- Stimme eher zu
- Stimme voll und ganz zu
- Stimme nicht zu
- Stimme weder zu, noch lehne ich ab
- Stimme zu

At German schools education is strongly constrained. Secondary schools normally only teach “English“, “Spanish“, and “French“ as foreign languages. Neither has PISA [Note: the OECD Programme for International Student Assessment] led to any changes in this regard. In order to additionally respect the needs of Turkish fellow citizens in Germany, Turkish lessons should also be offered by the schools. Conclusion: This extension of the range of language teaching is also enrichment for German children.

- Strongly disagree
- Rather disagree
- Rather agree
- Strongly agree
- Disagree
- Neither agree nor disagree
- Agree

Im Grundgesetz für die Bundesrepublik Deutschland (Artikel 4 der Grundrechte) steht unter anderem: “Die ungestörte Religionsausübung wird gewährleistet“. Zur freien Religionsausübung zählt auch, dass türkische Frauen ein Kopftuch tragen können, wenn Ihre Religion dieses von ihnen verlangt. Schlussfolgerung: Türkische Frauen sollten auch als Lehrerinnen an öffentlichen Schulen ein Kopftuch tragen dürfen.

- Stimme überhaupt nicht zu
- Stimme eher nicht zu
- Stimme eher zu
- Stimme voll und ganz zu
- Stimme nicht zu
- Stimme weder zu, noch lehne ich ab
- Stimme zu

The German constitution (paragraph 4, fundamental rights) states that untroubled practice of one's religion is ensured. Free practice of one's religion also includes that Turkish women should be allowed to wear a headscarf if their religion demands it. Conclusion: Turkish women should also be allowed to wear a headscarf if they are teachers at public schools.

- Strongly disagree
- Rather disagree
- Rather agree
- Strongly agree
- Disagree
- Neither agree nor disagree
- Agree

In Deutschland sind einige tausend Polizisten türkischer Abstammung. Die Besetzung der Polizei mit Polizisten unterschiedlicher Abstammung hat einige Vorteile: Diese Polizisten können mit Straftätern reden, die kein Deutsch verstehen, und werden häufig als Übersetzer angefordert. Außerdem werden z.B. die Aufforderungen eines türkischen Polizisten an einen türkischen

Straftäter von diesem eher respektiert—der Straftäter fühlt sich von jemandem mit derselben Abstammung eher verstanden. Schlussfolgerung: Der Anteil “ausländischer“ Polizisten sollte vergleichbar sein mit dem Anteil ausländischer Einwohner in Deutschland (z.B. mehr türkischstämmige Polizisten in Berlin).

- | | |
|---|--|
| <input type="radio"/> Stimme überhaupt nicht zu | <input type="radio"/> Stimme nicht zu |
| <input type="radio"/> Stimme eher nicht zu | <input type="radio"/> Stimme weder zu, noch lehne ich ab |
| <input type="radio"/> Stimme eher zu | <input type="radio"/> Stimme zu |
| <input type="radio"/> Stimme voll und ganz zu | |

In Germany several thousand police officers are of Turkish origin. Hiring police officers with different backgrounds has several advantages: These officers can talk to criminals who are not able to understand German and are often called in as translators. Furthermore, requests by Turkish police officers toward Turkish criminals are more likely to be respected—the criminal will feel better understood by someone of the same origin. Conclusion: The proportion of "foreign" police officers should be as high as the proportion of foreign residents in Germany (e.g. more policemen of Turkish origin in Berlin).

- | | |
|---|--|
| <input type="radio"/> Strongly disagree | <input type="radio"/> Disagree |
| <input type="radio"/> Rather disagree | <input type="radio"/> Neither agree nor disagree |
| <input type="radio"/> Rather agree | <input type="radio"/> Agree |
| <input type="radio"/> Strongly agree | |
-

Durch die Einwanderung von Menschen mit unterschiedlicher Herkunft hat sich die Vielfalt des Essens in Deutschland deutlich vergrößert: Im Stadtbild finden wir überall Pizzerien (italienischer Einfluss), Imbiss-Stände, die Döner Kebab verkaufen (türkischer Einfluss) aber auch viele arabische, chinesische, indische oder thailändische Restaurants. Schlussfolgerung: Die Einwanderung von Menschen aus unterschiedlichen Ländern nach Deutschland wirkt sich positiv auf unsere kulinarische Vielfalt aus.

- | | |
|---|--|
| <input type="radio"/> Stimme überhaupt nicht zu | <input type="radio"/> Stimme nicht zu |
| <input type="radio"/> Stimme eher nicht zu | <input type="radio"/> Stimme weder zu, noch lehne ich ab |
| <input type="radio"/> Stimme eher zu | <input type="radio"/> Stimme zu |
| <input type="radio"/> Stimme voll und ganz zu | |

The immigration of people with different origin has notably enlarged the variety of food in Germany: In every city we find pizzerias (Italian influence), snack bars selling "Döner Kebab" (Turkish influence), but also numerous Arabic, Chinese, Indian or Thai restaurants. Conclusion: The immigration of people from different countries to Germany has positively influenced the culinary variety.

- | | |
|---|--|
| <input type="radio"/> Strongly disagree | <input type="radio"/> Disagree |
| <input type="radio"/> Rather disagree | <input type="radio"/> Neither agree nor disagree |
| <input type="radio"/> Rather agree | <input type="radio"/> Agree |
| <input type="radio"/> Strongly agree | |
-

In den letzten Jahren hat der Grundbesitz bei Türken stärker zugenommen und sie haben ebenfalls mehr Bausparverträge abgeschlossen als früher. Diese Fakten belegen, dass türkisch-stämmige Mitbewohner Deutschland in den letzten Jahren stärker als ihre Heimat betrachten und hier sesshaft werden möchten. Schlussfolgerung: Dieses Verhalten der türkischer Bürger in Deutschland ist eine wichtige Voraussetzung für eine erfolgreiche Integration.

- Stimme überhaupt nicht zu
- Stimme eher nicht zu
- Stimme eher zu
- Stimme voll und ganz zu
- Stimme nicht zu
- Stimme weder zu, noch lehne ich ab
- Stimme zu

In recent years, property ownership among Turks has been increasing, and they have also contracted more building loan agreements than before. These factors show that residents with Turkish origin now regard Germany more as their home country and wish to settle here permanently. Conclusion: This behavior of Turks in Germany is an important precondition for their successful integration.

- Strongly disagree
- Rather disagree
- Rather agree
- Strongly agree
- Disagree
- Neither agree nor disagree
- Agree

Während die Bevölkerung auf der Erde insgesamt zunimmt, findet man in Deutschland abnehmende Geburtenraten. Diese niedrigen Geburtenzahlen wirken sich z.B. negativ auf die Sicherstellung der Rente aus. Von den deutschen Einwohnern haben dabei vor allem türkische Familien besonders viele Kinder. Zudem ziehen immer noch türkische Personen nach Deutschland. Dadurch hat sich die Zahl der Muslime in Deutschland deutlich erhöht: Waren es im Jahr 2000 noch 3,04 Millionen Muslime in Deutschland, sind es im Jahr 2006 schon 4,44 Millionen Muslime. Schlussfolgerung: Der Anstieg an türkisch-stämmigen Einwohnern in Deutschland könnte sich langfristig positiv auf die Bevölkerungs-Entwicklung Deutschlands auswirken und somit unsere Rente retten.

- Stimme überhaupt nicht zu
- Stimme eher nicht zu
- Stimme eher zu
- Stimme voll und ganz zu
- Stimme nicht zu
- Stimme weder zu, noch lehne ich ab
- Stimme zu

Whereas the human population on earth increases, birth rates in Germany are decreasing. These low birth rates negatively affect e.g. the security of pension funds. Among the residents of Germany, especially Turkish families have many children. Furthermore, many Turkish people are still moving to Germany. This has drastically increased the population of Muslims in Germany: Whereas in 2000, 3.04 million Muslims lived in Germany, in 2006 their number had increased to 4.44 million. Conclusion: The increase of residents with Turkish origin in Germany

may have a positive long-term effect on the demographic development in Germany and thereby make our pensions more secure.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

Die Arbeitslosenquote von Ausländern in Deutschland ist schon seit mehreren Jahren konstant doppelt so hoch wie die Arbeitslosenquote von Deutschen: So betrug im Jahr 2005 die Arbeitslosenquote 12,1 Prozent bei Deutschen, bei Ausländern aber 25,2 Prozent. Durch diese hohe Arbeitslosenquote beziehen Ausländer mehr Sozialleistungen als Deutsche.

Schlussfolgerung: Wenn Ausländer über einen längeren Zeitraum keine Beschäftigung haben, sollten sie aus dem Land ausgewiesen werden.

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

For several years, the unemployment rate of foreigners in Germany has been twice as high than that of Germans: In 2005, for example, the unemployment rate among Germans was 12.1%, whereas among foreigners it was 25.2%. Because of this high unemployment rate, foreigners receive more social security benefits than Germans do. Conclusion: If foreigners do not have employment over a longer period of time, they should be expelled from the country.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

Unter dem Begriff "Ehrendelikte" geschehen auch in Deutschland von Zeit zu Zeit Straftaten: Ehrendelikte liegen dann vor, wenn ein türkischer Ehemann seine Frau umbringt, weil sie sich in seinen Augen unehrenhaft verhalten hat (z.B. hat sie ihn mit einem anderen Mann betrogen). Dieses Verhalten wurde lange Zeit in der Türkei nicht so hart bestraft wie andere Morde. In Deutschland sind Ehrendelikte klar eine Verletzung der deutschen Gesetze. Schlussfolgerung: Ausländische Täter solcher "Ehrendelikte" sollten hart bestraft und nach Abbüßen der Strafe sofort aus dem Land verwiesen werden.

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

So-called "crimes of honour" also happen in Germany from time to time. The term describes crimes such as a Turkish husband's killing of his wife, because from his point of view she has behaved in a dishonourable way (e.g. she has cheated on him). For a long time, in Turkey such

behaviour was not punished as harshly as other types of murder. In Germany, honour killings are an obvious violation of the law. Conclusion: Foreign perpetrators of "crimes of honour" should be penalized harshly and, after serving their sentence, should be expelled from the country immediately.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

Immer wieder muss man feststellen, dass z. B. türkische Ausländer Goldketten tragen, mit protzigen Autos durch die Stadt fahren und vergünstigte Konditionen für den Kauf von Grundstücken erhalten. Dieselben Türken sind aber auch arbeitslos und tragen nichts zu unserem Sozialstaat bei. Schlussfolgerung: Arbeitslose Türken sollten in Deutschland keinen Grundbesitz erwerben dürfen (d.h. sie dürfen keine Häuser oder Eigentumswohnungen kaufen).

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

One may often observe that Turkish immigrants wear gold necklaces, drive showy cars around town, and get special conditions when buying property. The same Turks, however, are unemployed and do not contribute to our welfare state. Conclusion: Unemployed Turks should not be allowed to buy property (including houses and condos) in Germany.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

In Deutschland werden auch heute noch Frauen aus einigen türkischen Familien vor Ihrem 18. Lebensjahr (z.T. gegen ihren eigenen Willen) mit einem Mann verheiratet. Eine gute Schulbildung muslimischer Frauen wird in traditionell geprägten Familien als nicht notwendig erachtet. Schlussfolgerung: Gläubige Türken haben ein Bild von Frauen, welches mit unseren deutschen Werten nicht in Einklang zu bringen ist.

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

In Germany, even nowadays women from Turkish families are often married before their 18th year of age, in many cases against their own will. A good education of Muslim women is not

seen as essential in traditional families. Conclusion: Religious Muslims have an idea of women that cannot be reconciled with our German values.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

Deutschland hat in der PISA-Studie relativ schlecht abgeschnitten. Eine Ursache wird in den schlechten Sprachkenntnissen ausländischer Kinder gesehen: Wenn die Kinder den Lehrer/die Lehrerin nicht verstehen können, können sie natürlich auch nichts lernen. Stattdessen stören sie die anderen Schüler, und es können weniger Lerninhalte vermittelt werden.

Schlussfolgerung: Ausländische Kinder mit sprachlichen Schwierigkeiten sollten nicht in deutschen Schulen zugelassen werden.

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

Germany did relatively poorly in the PISA study [Note: the OECD Programme for International Student Assessment]. One reason may be seen in the poor knowledge of foreign children: If these children do not understand their teachers, they certainly cannot learn anything. Instead they disturb other students and less content can be taught. Conclusion: Foreign children with language difficulties should not be admitted to German schools.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

Auch wenn sich in den letzten Monaten die Arbeitsplatzsituation leicht entspannt hat, gibt es immer noch viele Menschen in Deutschland, die einen Arbeitsplatz suchen, aber nicht finden: Im Jahr 2006 waren noch 3,432 Millionen Menschen in Deutschland arbeitslos (die Gesamtbevölkerung betrug zu diesem Zeitpunkt 82,365 Millionen Menschen). Schlussfolgerung: Gäbe es nicht so viele Menschen, die aus anderen Ländern nach Deutschland immigriert sind, hätten wir auch nicht so eine hohe Arbeitslosenquote.

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

Even though the employment situation has improved somewhat within the last months, there are still a lot of people in Germany who are looking for a job but cannot find one: In the year 2006, 3.432 million people in Germany were unemployed (the whole German population in that year

was 82.365 million inhabitants). Conclusion: If there were not so many people who immigrated from other countries to Germany, we would not have such a high unemployment rate.

- Strongly disagree Disagree
 - Rather disagree Neither agree nor disagree
 - Rather agree Agree
 - Strongly agree
-

Es sind besonders häufig türkische Jugendliche, die an öffentlichen Plätzen Frauen hinterher pfeifen und diese belästigen. Und auch in Straßen- bzw. U-Bahnen benehmen sich ausländische Jugendliche oft unangemessen: Sie sind laut und nehmen keine Rücksicht auf andere Fahrgäste. Schlussfolgerung: Ausländische Jugendliche werden von ihren Eltern nicht richtig erzogen.

- Stimme überhaupt nicht zu Stimme nicht zu
- Stimme eher nicht zu Stimme weder zu, noch lehne ich ab
- Stimme eher zu Stimme zu
- Stimme voll und ganz zu

It is primarily Turkish adolescents who harass women and whistle after them in public places. In trams and subways as well, foreign teenagers often do not behave appropriately: They are loud and do not respect other passengers. Conclusion: Foreign teenagers are not being raised properly by their parents.

- Strongly disagree Disagree
- Rather disagree Neither agree nor disagree
- Rather agree Agree
- Strongly agree

End of Block: Racial Argument Scale (Heitland & Bohner, 2011)

Start of Block: Shortform intergroup anxiety (Paolini et al., 2004)

Wenn sie einer Türkischstämmigen Person begegnen oder mit ihr sprechen, fühlen Sie sich...

	Stimme überhaupt nicht zu	Stimme nicht zu	Stimme weder zu, noch lehne ich ab	Stimme zu	Stimme voll und ganz zu
Glücklich	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seltsam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unsicher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selbstbewusst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enspannt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Defensiv	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When interacting with a Turkish person, to what extent do you feel...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
self-conscious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
relaxed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
defensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Shortform intergroup anxiety (Paolini et al., 2004)

Start of Block: Intergroup empathy; Aberson and Haag (2007)/Capozza, et al. (2013)

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Sie zutreffen.

	Überhaupt nicht	Eher nein	Stimme weder zu, noch lehne ich ab	Eher ja	Voll und ganz
Ich denke ich verstehe, wie Türken die Welt sehen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich verstehe die Perspektive der Türken auf die meisten Themen nicht.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verstehen Sie die Emotionen die Türken fühlen?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fühlen Sie dieselben Emotionen wie Türken?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How do you feel about Turks?

	1	2	3	4	5	6	7	
negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	positive
hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	friendly
suspicious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	trusting
contempt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	respect

End of Block: General attitude (Swart et al., 2011; Wright et al., 1997)

Start of Block: National pride (Wagner et al., 2012)

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Sie zutreffen.

	Stimme überhaupt nicht zu	Stimme nicht zu	Stimme zu	Stimme voll und ganz zu
Ich bin stolz, Deutsch zu sein.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin stolz auf die Deutsche Geschichte.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin stolz auf Deutschlands Demokratie.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin stolz auf den Deutschen Wohlfahrtsstaat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate to what extent the following statements apply to you.

	Strongly disagree	Disagree	Agree	Strongly agree
I am proud to be a German.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of the German history.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of Germanys democracy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of Germanys welfare system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: National pride (Wagner et al., 2012)

Start of Block: Debriefing Control Group

Vielen Dank für Ihre Teilnahme an dieser Studie.

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Vorurteile und Diskriminierung erfolgen in den meisten Fällen nicht bewusst, oder gar mit böser Absicht. Im Gegenteil; durch soziale Strukturen und der Natur des Menschen werden solche Denkmuster unbewusst geprägt und gefördert. Dennoch liegt es in der Hand der einzelnen Person, sich mit dem Thema auseinanderzusetzen und die Abwertung von Gruppen in der Minderheit zu unterlassen. Falls Sie interessiert an diesem Thema sind, finden Sie unten einige Informationsquellen.

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Please indicate how you perceived the chat to be.

	1	2	3	4	5	6	7	
equal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unequal
involuntary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	voluntary
superficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	intimate
pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unpleasant
competitive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	cooperative

End of Block: Positivity of the contact (Islam & Hewstone, 1993)

Start of Block: Media richness scale (Suh, 1999)

Die folgenden Fragen sind dazu da zu untersuchen, ob sich ein textbasierter Chat geeignet hat, die gestellte Aufgabe zu lösen.

Start of Block: Debriefing group Turkish

Vielen Dank für Ihre Teilnahme an dieser Studie.

In Deutschland leben drei Millionen Menschen mit türkischem Hintergrund. Trotz ihrer Integration und Einbürgerung berichten mehr als die Hälfte von ihnen, in Deutschland diskriminiert zu werden. Oft sind türkische Mitbürger in Bezug auf Arbeit und Bildung benachteiligt, was auf Vorurteilen in der Bevölkerung in Deutschland beruht. Um dieser Ungleichbehandlung entgegenzuwirken, war das Ziel dieser Studie herauszufinden, ob der digitale Kontakt zu einer scheinbar türkischen Person und die gemeinsame Bearbeitung einer Aufgabe Vorurteile abbauen kann. **Sie haben dabei die Aufgabe mit einem der beteiligten Forschern gelöst, welcher Zwecks des Experiments einen türkischen Namen annahm.** Ihre Teilnahme wird von den beteiligten Forschern sehr geschätzt. Die erhobenen Daten könnten möglicherweise dazu beitragen, mehr Gleichberechtigung in Deutschland zu etablieren.

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Jetzt, nachdem Sie das Debriefing gelesen haben, stimmen Sie Ihrer Teilnahme, und der Verwendung Ihrer Antworten immer noch zu?

- Ja, ich stimme zu.
- Nein, ich stimme nicht zu.

If you have any questions about this study, please contact Nell Royal (n.royal@student.utwente.nl). As indicated at the beginning, all data is kept anonymous and treated confidential. Now, that you have read the debriefing, do you still consent with your participation?

- Yes, I consent
- No I do not consent
-

Falls Sie den Abschlussbericht erhalten möchten, wenn er fertig ist, geben Sie bitte unten Ihre E-Mail-Adresse ein. Danke!

In case that you would like to receive the final report when it is finished, please put your email address below. However, it is not mandatory to do so. Thank you!

End of Block: Debriefing group Turkish

Start of Block: Debriefing group German

Vielen Dank für Ihre Teilnahme an dieser Studie.

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Ja, ich stimme zu. Nein, ich stimme nicht zu.

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Yes I consent No I do not consent

Falls Sie den Abschlussbericht erhalten möchten, wenn er fertig ist, geben Sie bitte unten Ihre E-Mail-Adresse ein. Danke!

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End of Block: Debriefing group German

Appendix C

Conversation guide: German

Start conversation (in every conversation the same)

Hey ! ich bin Emre/Jonas. Wie geht's so? Schon irgendwelche Ideen zur work-life balance?

Bringing up ideas (flexible)

Hmm.. also von meinen Eltern hab ich gelernt, dass mittagspausen und wochenenden wichtig sind, und auch für hobby und freizeit frei bleiben müssen. Ich denke, verzichtet man auf freie Tage, hat man keinen ausgleich und ist dann auch von kurzen tagen total geschafft.

Hm. Ich weiss manchmal selbst nicht so recht ob ich das mit der work-life balance hinbekomme. Was mir immer hilft, ist einfach mal das handy aus zu machen und abzuschalten, wenn ich viel gearbeitet habe.

Also ich hab gemerkt dass ich viel besser klar komme wenn ich mein handy beim arbeiten nicht bei mir habe.

Oh, oder vielleicht könnte auch meditieren einigen leuten helfen.

Oder sport treiben, eine runde laufen gehen oder so.

Ich glaube, es ist auch einfach wichtig nicht immer alles perfektionieren zu müssen. Wenn man sich das erstmal verinnerlicht hat, dass nicht immer alles perfekt sein muss, dann fällt eine Menge druck von einem ab.

Ich finde es auch immer wichtig zeit für die Familie zu haben. Glaube das sollte immer priorität sein, dass man für seine freunde und verwandten zeit hat.

Prioritäten zu setzen ist einfach wichtig denke ich. Wenn man sich überlegt was einem am wichtigsten ist und sich dann dementsprechend zeit nimmt.

Schwierig. Ich glaub es ist auch wichtig einfach mal nein sagen zu können, wenn malwieder irgendjemand einen um etwas bittet.

Das wichtigste ist aufjedenfall immer dass man gesund bleibt. Wenn das bedeutet dass man mal nicht arbeiten/lernen kann, ja dann ist das halt so. Karriere, studium, job oder sonst was bringt einem garnichts, wenn man psychisch oder körperlich am ende ist.

Gleitzeit wäre auch supi

Auszeiten sind aufjedenfall auch ganz wichtig, denke ich.

Hobbies sind zum ausgleich essenziell.

Selbstfürsorge! Man muss sich manchmal zwar dazu zwingen, aber ich denke dass ist das a und o.

Kleine Ziele setzen und langsam nach vorn arbeiten.

Für manche Leute ist es bestimmt auch wichtig struktur zu haben. Ein ordentlicher Bio-Rythmus und bestimmte Zeiten, in denen man sich auch Zeit für sich gönnt.

End conversation

Na gut, also ich glaub das reicht erstmal, oder? Hab jedenfalls keine ideen mehr.

Ja dann lass uns mal die umfrage weiter machen.. wünsche dir noch einen schönen Tag!

[Wenn partner beendet] Ja genau, ich glaube auch, dass das erstmal reicht. Na dann lass uns mal die umfrage weiter machen.. wünsche dir noch einen schönen Tag!

Hm also ich weiss ja nicht, wie viele ideen wir hier sammeln sollen, aber ich glaub das reicht erstmal, oder? Hab jedenfalls keine ideen mehr.

Conversation guide: English

Start conversation (in every conversation the same)

Hi! I am Emre/Jonas. How are you? Any ideas concerning work-life balance?

Bringing up ideas (flexible)

Hm.. so my parents taught me that lunch breaks and weekends are essential, and that time for hobbies and leisure time needs available. I believe that if you do not take your days off, there is no balance and you'll be exhausted quickly.

Hm. Sometimes I don't know if I manage my worklife balance well. What helps is disconnecting by just turning off the phone, especially when I worked alot.

So I realized that I get along way better when I turn off my phone while working.

Maybe meditating may help some people.

Or doing sports, running and stuff.

I think it is important not to be too perfectionistic all the time. If you really get that not everything needs to be perfect all the time, a lot of pressure just falls off of you.

I also think it is important to take time off for the family. I believe that always should be a priority, to take time for family and relatives.

Priorities are key I think. If you think about whats the most important thing for you and in your life, and then taking time off for that.

Thats hard. I think it is important just saying no at times when someone wants something from you.

The most important thing is staying healthy for sure. If that means you may not work or study, then it is what it is. Carreer, studies, job or what ever wont get you far if you are on the edge of breaking down physically and psychologically.

Flexible working hours would be great

Time out is also very important, I think.

Hobbies are essential for balance.

Self-care! Sometimes you have to force yourself to do it, but I think that's the be-all and end-all.

Set small goals and slowly work forward.

For some people, I think it's also important to have structure. A proper bio rhythm and certain times when you allow yourself time for yourself.

End conversation

Ok, i think thats enough for now, right? I dont have any more ideas.

Yes, lets continue with the survey then.. Have a nice rest of your day!

[*If partner ends it*] True, I agree that should be enough. Lets continue with the survey then.. Have a nice rest of your day!

Hm I dont know how many ideas we are supposed to collect, but I believe this should be enough, right? I dont have any more ideas

Appendix D

Figure D1

Example of a chat in German.

(11:48:03) System: >> User 1 has Connected
 (11:48:14) System: >> All chat participants have arrived. You may now chat!
 (11:48:14) System: >> User 2 has Connected
 (11:48:17) User 2: hi!
 (11:48:21) User 1: Hallo
 (11:48:31) User 2: ich bin Emre. Wie geht's so? Schon irgendwelche Ideen zur work-life balance?
 (11:49:08) User 1: Ich bin [participant name]. Gut und dir? Für sich selbst Auszeiten nehmen wäre meine erste Idee
 (11:49:19) User 1: du?
 (11:49:32) User 2: auch :-)) ja also auszeiten sind aufjedenfall wichtig, denke ich auch..
 (11:49:37) User 2: Oder sport treiben, eine runde laufen gehen oder so.
 (11:50:28) User 1: Auch eine gute Idee!
 (11:50:47) User 1: Generell für sich Hobbys finden, die einem Spaß machen und bei denen man abschalten kann.
 (11:51:08) User 2: irgendwie schwierig. weiss ja selbst nicht mal ob ich das vernünftig mache das so auszugleichen.
 (11:51:27) User 2: ja genau, hobbies. Prioritäten zu setzen ist einfach generell wichtig denke ich. Wenn man sich überlegt was einem am wichtigsten ist und sich dann dementsprechend zeit nimmt.
 (11:52:26) User 1: Ja, das stimmt! Tipps geben ist immer einfacher als die umzusetzen... Vielleicht auch klare Grenzen zwischen Arbeit und Privatleben ziehen also z.B. das Geschäftshandy nach Feierabend ausschalten, Laptop wegräumen etc.
 (11:52:58) User 2: oh ja genau.. screen time einfach einschränken. meine schwachstelle haha
 (11:53:21) User 2: Hm also ich weiss ja nicht, wie viele ideen wir hier sammeln sollen, aber ich glaub das reicht erstmal, oder? Hab jedenfalls keine ideen mehr.
 (11:53:54) User 1: Auch eine gute Idee! Ja, ich glaube das reicht erstmal :)
 (11:54:09) User 2: nice. einen schönen tag noch! :-))
 (11:54:24) User 1: Dir auch :)
 (11:54:27) System: >> User 1 has Disconnected
 (11:55:05) System: >> User 2 has Disconnected
 (12:02:18) System: >> This chat has 60 seconds remaining before expiring. Please start wrapping up your conversation.
 (12:03:18) System: >> This chat has now expired.

Figure D2

Example of a chat translated in English.

(11:48:03) System: >> User 1 has Connected
 (11:48:14) System: >> All chat participants have arrived. You may now chat!
 (11:48:14) System: >> User 2 has Connected
 (11:48:17) User 2: hi!
 (11:48:21) User 1: Hello
 (11:48:31) User 2: I am Emre. How are you? Any ideas for work-life balance already?

(11:49:08) User 1: I'm [participant name]. Good and you? Taking time for yourself would be my first idea

(11:49:19) User 1: you?

(11:49:32) User 2: also :-) yes, time out is definitely important, i think so too...

(11:49:37) User 2: Or do sports, go for a run or something.

(11:50:28) User 1: Also a good idea!

(11:50:47) User 1: In general, find hobbies that you enjoy and where you can switch off.

(11:51:08) User 2: It's kind of difficult. I don't even know if I balance it properly.

(11:51:27) User 2: Yes, exactly, hobbies. I think it's important to set priorities in general. If you think about what is most important to you and then take the time to do it.

(11:52:26) User 1: Yes, that's true! Giving tips is always easier than putting them into practice... Maybe also draw clear boundaries between work and private life, e.g. switch off the business mobile phone after work, put away the laptop etc.

(11:52:58) User 2: oh yes exactly... just limit screen time. my weak point haha

(11:53:21) User 2: Well, I don't know how many ideas we should collect here, but I think that's enough for now, don't you? Anyway, I don't have any more ideas.

(11:53:54) User 1: Also a good idea! Yes, I think that's enough for now :)

(11:54:09) User 2: nice. have a nice day! :-)

(11:54:24) User 1: You too :)

(11:54:27) System: >> User 1 has Disconnected

(11:55:05) System: >> User 2 has Disconnected

(12:02:18) System: >> This chat has 60 seconds remaining before expiring. Please start wrapping up your conversation.

(12:03:18) System: >> This chat has now expired

Appendix E

Table E1. Reliability and validity statistics of the scales.

Scale	Cronbach's Alpha	Spearman- Brown coefficient	Kaiser- Meyer- Olkin Measure	Bartlett's Test of Sphericity (p)	N of Items
Ingroup Identification	.87		.83	.00**	15
National Pride	.59		.50	.00**	4
Nationalism	.48	.48	.50	.00**	2
Patriotism	.67	.66	.50	.00**	2
Prejudice	.84		.82	.00**	13
General Attitude Towards Turks	.91		.82	.00**	4
Intergroup Anxiety	.78		.78	.00**	6
Intergroup Empathy	.65		.58	.00**	4
Positivity of the Interaction	.78		.75	.00**	5
Quality of the Medium	.80		.74	.00**	8

Note. ** $p < .01$. significant at the 0.01 level.

Appendix F

Figure F1

Frequency histogram of the variable prejudice.

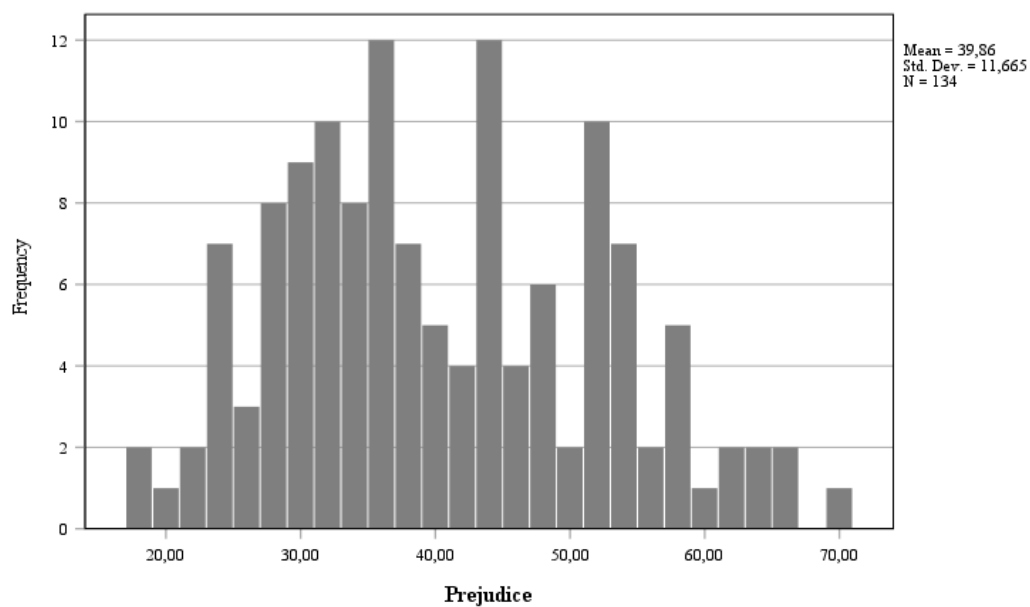


Figure F2

Frequency histogram of the variable ingroup identification.

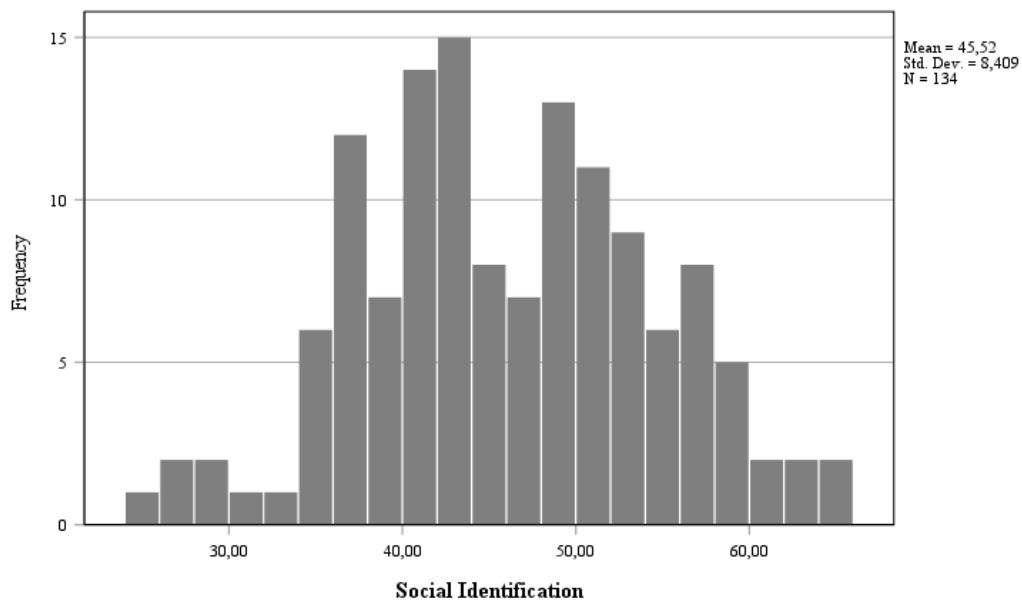
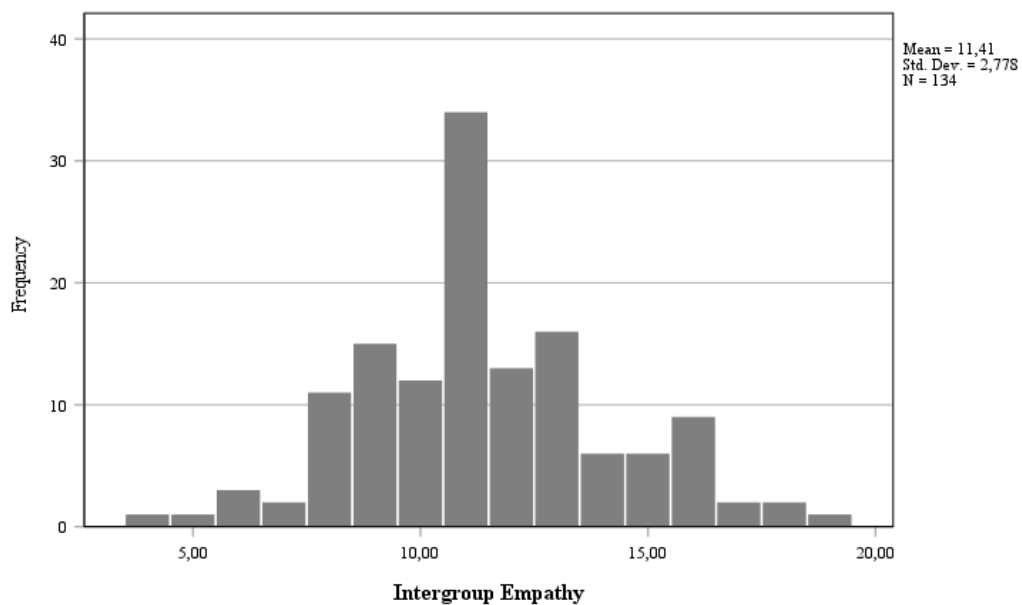


Figure F3

Frequency histogram of the variable intergroup empathy.

**Figure F4**

Frequency histogram of the variable national pride.

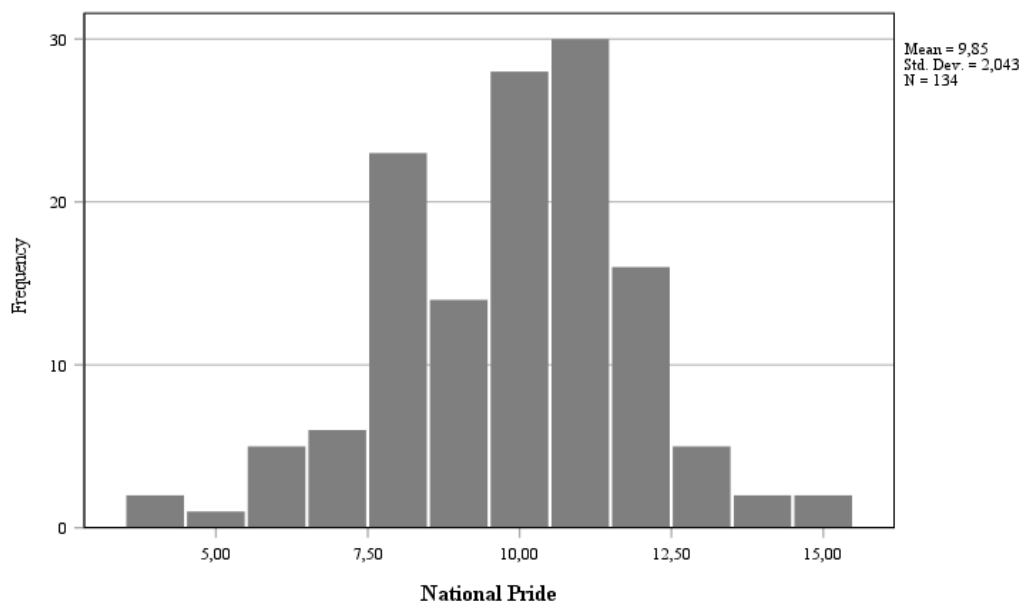
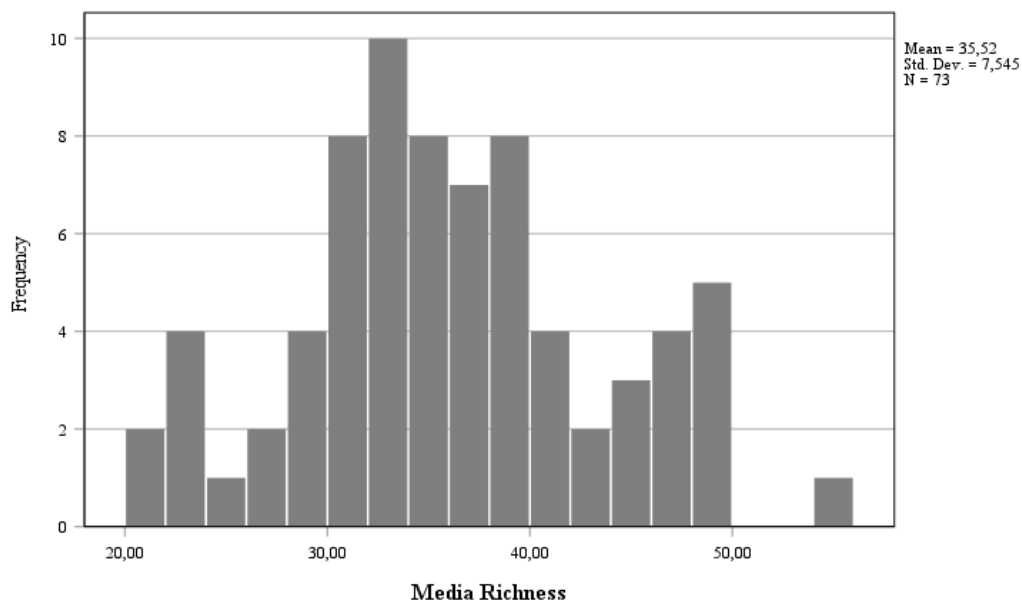


Figure F5

Frequency histogram of the variable media richness.

**Figure F6**

Frequency histogram of the variable intergroup anxiety.

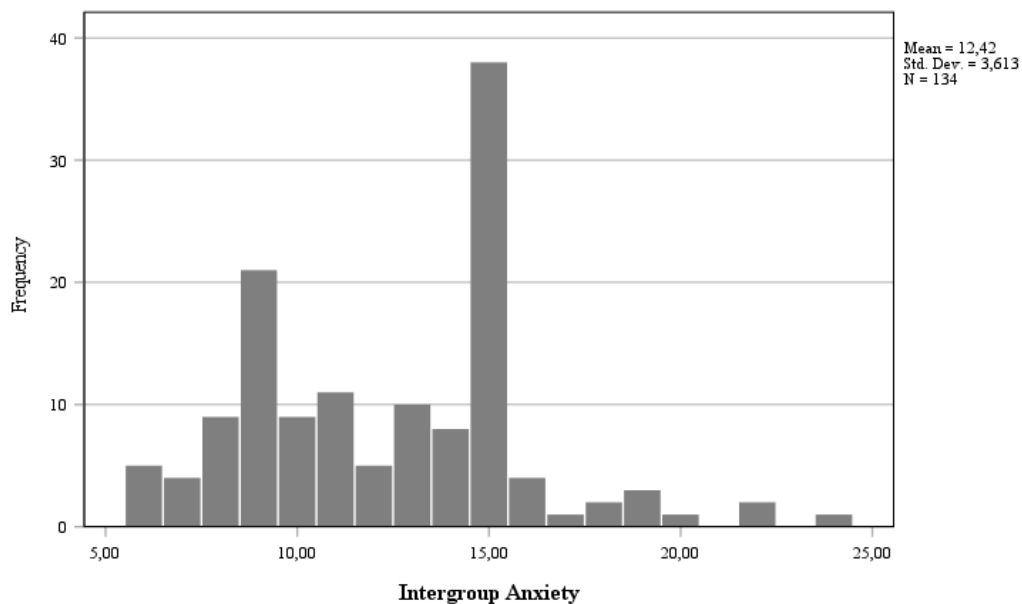
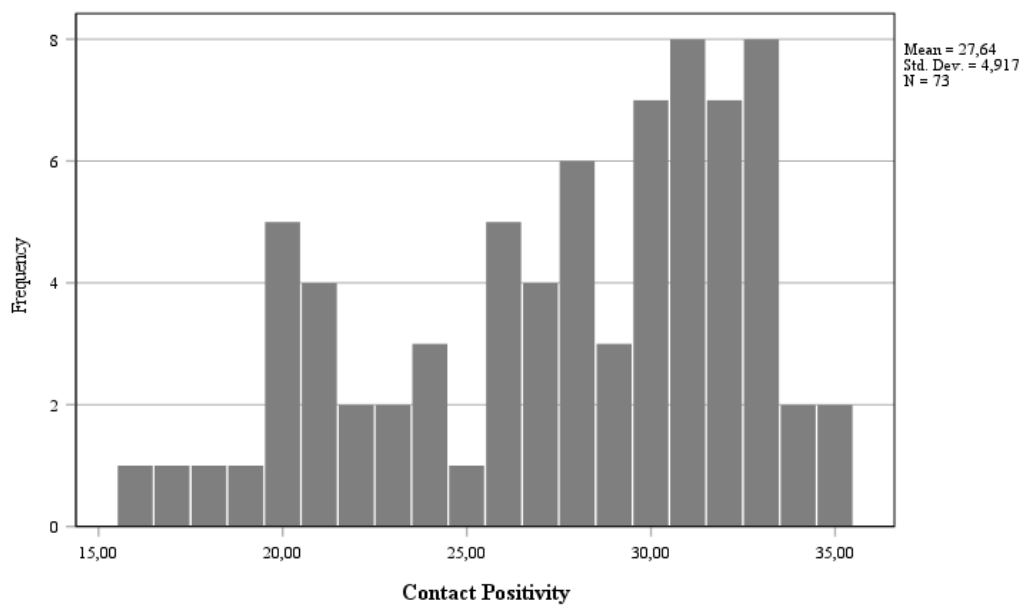


Figure F7

Frequency histogram of the variable contact positivity.

**Figure F8**

Frequency histogram of the variable General Attitude Towards Turks.

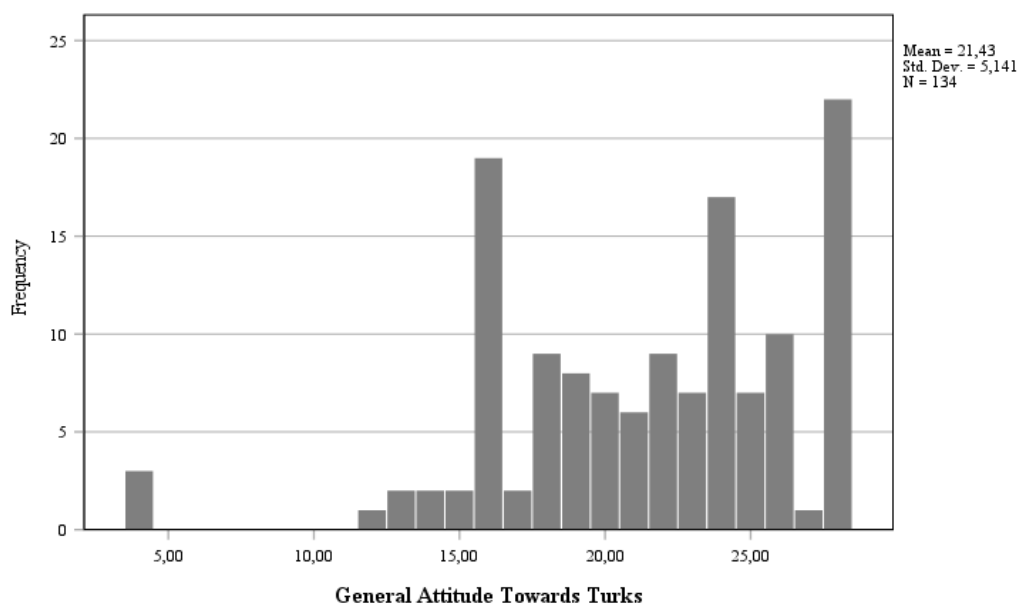
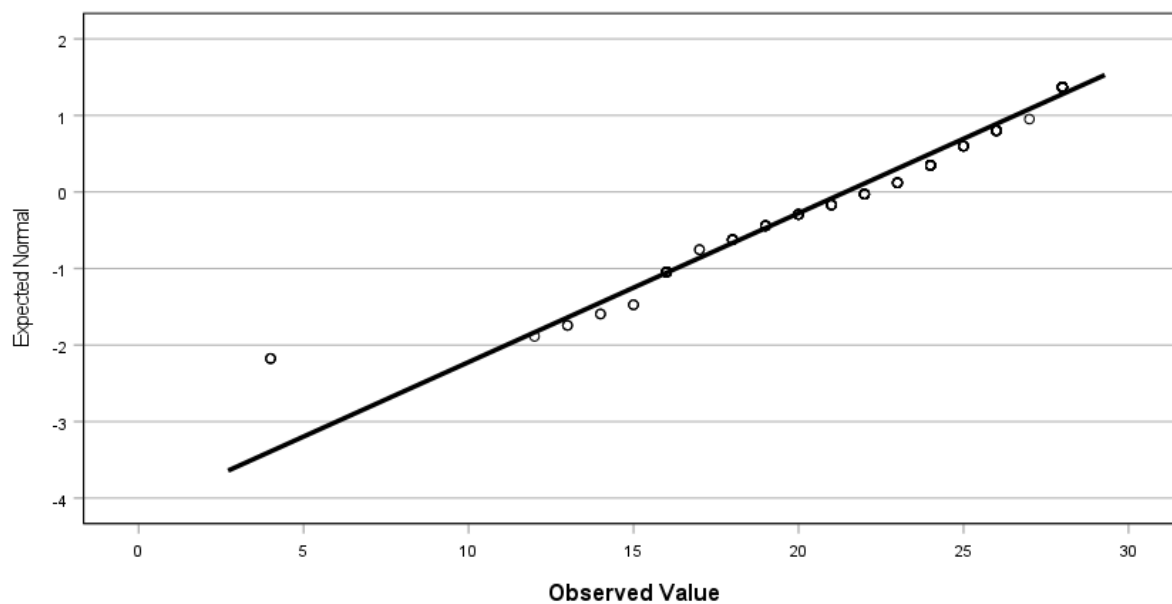


Figure F9

Normal Q-Q plot of the variable General Attitude Towards Turks.

**Figure F10**

Normal Q-Q plot of the variable intergroup anxiety.

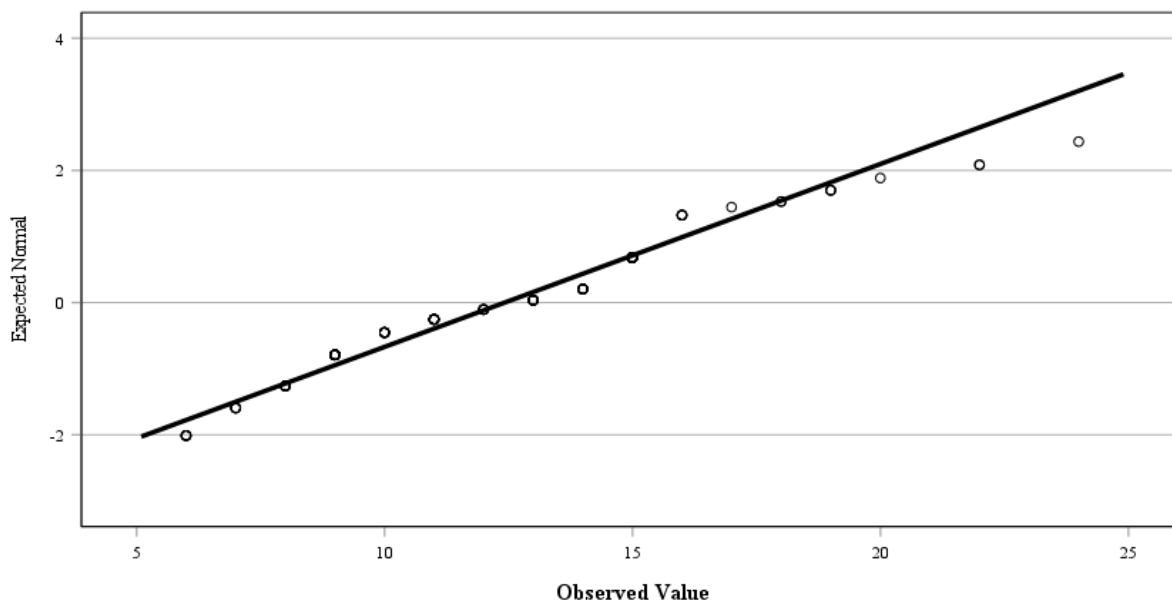
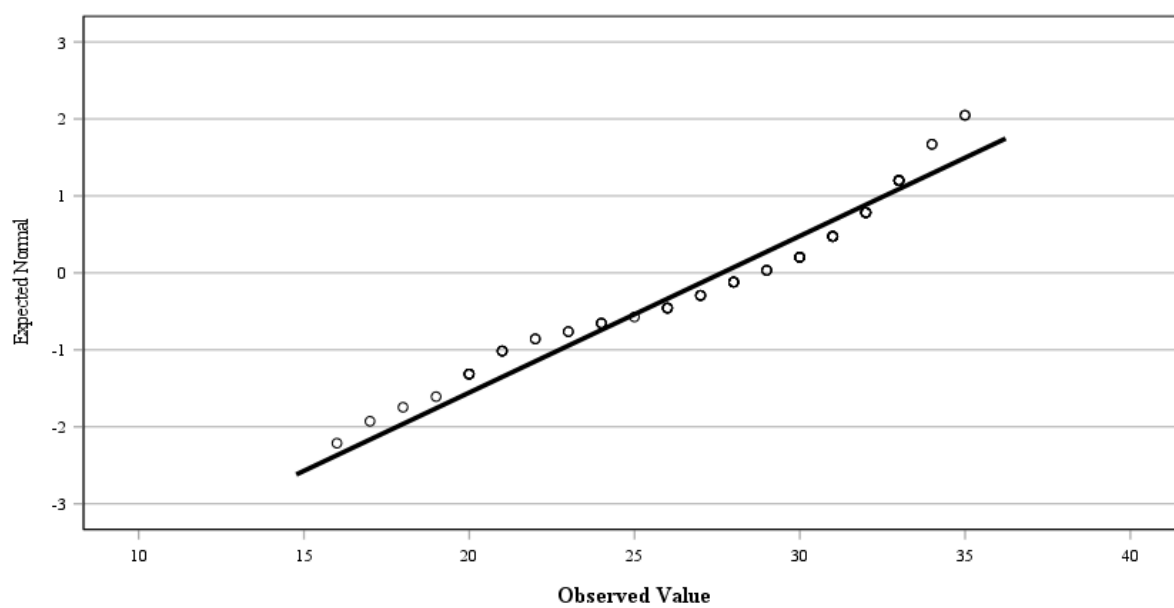


Figure F11

Normal Q-Q plot of the variable contact positivity.



Appendix G

Table G1. Frequencies of manipulation check responses.

		No	Yes	Unsure	
Group	Group 'Turkish'	0	26	10	36
	Group 'German'	19	0	18	37
Total		19	26	28	73

Note. Participants in group 'Turkish' responding 'no', and participants in group 'German' responding 'yes' were removed from the data set.

Appendix H
Figure H1

Scatterplot of prejudice by age without outliers.

