



Boundary Conditions of Imagined Contact: Explicit and Implicit Prejudice toward Syrian Migrants in Türkiye

Hayali Temasın Sınır Koşulları: Türkiye’de Suriyeli Göçmenlere Yönelik Açık ve Örtük Önyargı

İlknur Tayınmak¹ , Habibe Tuğba Erol Korkmaz² 

Abstract

This study examined the effects of imagined contact on explicit and implicit attitudes toward Syrian immigrants in Türkiye, a highly stigmatized group. Imagined contact has been proposed as an indirect strategy to improve intergroup relations, particularly where direct contact is limited. A total of 112 participants were randomly assigned to either an imagined positive interaction with Syrian immigrants (experimental group) or a neutral nature scenario (control group). Explicit attitudes were measured using a Feeling Thermometer, Social Distance Scale, and Attitudes Toward Refugees Scale, while implicit attitudes were assessed with an Implicit Association Test. Measures were administered at three time points within a 2 (group) × 3 (time) repeated-measures design. Results revealed no significant group × time interaction, indicating that imagined contact did not differentially influence attitudes compared to the control condition. However, a significant main effect of time emerged across both groups. Findings are discussed in relation to high baseline prejudice and possible measurement-related effects, highlighting boundary conditions of imagined contact in contexts characterized by entrenched negative attitudes.

Keywords: Imagined contact, prejudice, immigrant, explicit attitude, implicit attitude.

Özet

Bu çalışmada, Türkiye’de yüksek düzeyde damgalanan bir grup olan Suriyeli göçmenlere yönelik açık ve örtük tutumlar üzerinde hayali temasın etkisi incelenmiştir. Hayali temas, doğrudan temasın sınırlı olduğu bağlamlarda gruplar arası ilişkileri iyileştirmeye yönelik dolaylı bir strateji olarak önerilmektedir. Toplam 112 katılımcı, Suriyeli göçmenlerle olumlu bir etkileşimi hayal etme (deney grubu) ya da doğada nötr bir senaryoyu canlandırma (kontrol grubu) koşullarına rastgele atanmıştır. Açık tutumlar Duygu Termometresi, Sosyal Mesafe Ölçeği ve Mültecilere Yönelik Tutumlar Ölçeği ile; örtük tutumlar ise Örtük Çağırışım Testi ile ölçülmüştür. Ölçümler 2 (grup) × 3 (zaman) tekrarlı ölçümler deseninde üç zamanda gerçekleştirilmiştir. Bulgular, grup ile zaman arasında anlamlı bir etkileşim olmadığını ancak her iki grupta da zamana bağlı anlamlı bir değişim bulunduğunu göstermiştir. Sonuçlar, yüksek önyargı ve ölçüm sürecine bağlı olası etkiler bağlamında tartışılarak, yerleşik olumsuz tutumların bulunduğu bağlamlarda hayali temasın sınırlı etkilerine işaret etmektedir.

Anahtar Sözcükler: Hayali temas, önyargı, göçmenler, açık tutum, örtük tutum.

¹ Dr. Öğr. Üyesi, Karabük Üniversitesi İnsan ve Toplum Bilimleri Fakültesi, Psikoloji Bölümü, Karabük, Türkiye, ilknurtayinmak@karabuk.edu.tr

² Prof. Dr., Mersin Üniversitesi İnsan ve Toplum Bilimleri Fakültesi, Psikoloji Bölümü, Mersin, Türkiye, tuqbakorkmaz@mersin.edu.tr

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Introduction

The civil war that began in Syria in 2011 has led to large-scale forced migration, with Türkiye hosting more than three million Syrian migrants, the majority of whom are women and children (Association of Refugees, 2023). A growing body of research demonstrates that negative and prejudiced attitudes held by host society members are associated with adverse psychological, social, and physical outcomes for migrants, as well as difficulties in social integration and access to resources (e.g., Civitillo et al., 2023; Hashemi et al., 2021; Kim et al., 2019). Studies conducted in Türkiye consistently indicate that attitudes toward Syrian migrants are highly negative and characterized by elevated perceptions of threat (e.g., Dilaver, 2020; Gök, 2019; Yiğitoğlu & Vural, 2019). These attitudes are closely linked to migrants' psychological well-being, adaptation processes, and social participation (e.g., Bağcı & Canpolat, 2019; Karakaya, 2020; Yıldırım et al., 2017).

Intergroup contact has long been considered a key mechanism for reducing prejudice. However, in contexts characterized by high levels of intergroup tension and limited opportunities for positive direct contact—as is often the case for Syrian migrants in Türkiye—indirect forms of contact may offer a more feasible alternative. Imagined contact, defined as the mental simulation of a positive social interaction with an outgroup member (Turner et al., 2007), has emerged as a promising indirect contact strategy. Research grounded in Imagined Contact Theory suggests that imagining positive interactions with outgroup members can reduce intergroup anxiety and foster more favorable attitudes and behavioral intentions toward stigmatized groups (e.g., Crisp & Turner, 2012; Ginevra et al., 2021; Malott et al., 2023; Wojcieszak & Warner, 2020).

Recent studies and reviews indicate that the effectiveness of imagined contact depends on the content and structure of the imagined scenario. While early research predominantly relied on standard positive interaction scenarios (Turner et al., 2007), later studies demonstrated that scenarios emphasizing cooperation, voluntariness, or shared group membership produce stronger prejudice-reducing effects (e.g., Husnu & Paolini, 2019; Kuchenbrandt et al., 2013; Vezzali et al., 2015). These findings align with broader intergroup theories suggesting that prejudice reduction is facilitated when contact—direct or imagined—incorporates elements such as equal status, common goals, cooperation, and institutional support (Allport, 1954; Pettigrew, 1998), as well as the salience of a shared social identity (Gaertner & Dovidio, 2000; Tajfel & Turner, 1979).

Building on this theoretical integration, the present study employed an imagined contact scenario designed to emphasize equal status, cooperation, common goals, institutional support, and a sense of shared identity between participants and Syrian migrants. In addition to examining immediate effects, the study addressed an important limitation in the imagined contact literature by testing the durability of these effects over time. Although several studies have reported that imagined contact can produce lasting reductions in explicit and implicit prejudice (e.g., Ioannou, 2019; Küçükkömürler, 2013; Schuhl et al., 2019), findings remain mixed, particularly in high-prejudice contexts and non-Western samples. For instance, imagined contact has been examined in the Turkish context across different target groups, including Kurdish and Turkish groups, sexual minorities, and Syrian migrants. Some studies (e.g., Bağcı et al., 2018a; Küçükkömürler, 2013) have found that imagined contact reduces prejudicial attitudes and enhances more positive evaluations toward outgroups. However, other research (e.g., Fırat, 2019) has reported limited or non-significant effects of imagined contact on prejudice. Notably, evidence also suggests that the effectiveness of imagined contact may be attenuated under conditions of high ingroup identification (e.g., Bağcı et al., 2018a; Tümer, 2021).

The primary aim of the current study was to examine whether imagined contact reduces explicit and implicit prejudiced attitudes toward Syrian migrants in Türkiye and whether these effects persist over time. By employing a pre-test, post-test, and delayed follow-up design and including both explicit and implicit measures of prejudice, this study seeks to contribute to the imagined contact literature by clarifying the boundary conditions of its effectiveness in a context marked by entrenched intergroup prejudice. The findings are expected to have both theoretical implications for indirect contact models and practical implications for prejudice-reduction interventions targeting attitudes toward migrants.

Hypotheses

Hypothesis 1: The prejudice scores of the participants exposed to the imagined contact scenario (experimental condition) are significantly lower than those in the control condition. While there is a statistically significant difference between the pre-test and post-test prejudice scores of the participants in the imagined contact condition, there is no significant difference in the prejudice scores of the participants in the control group.

Hypothesis 2: No statistically significant difference exists between the prejudice measurement after the imagined contact (Time 2) and the prejudice measurement six weeks later (Time 3). Exposure to the imagined contact scenario continues to affect prejudice measures six weeks later.

Method

Participants

This study included 112 voluntary participants between the ages of 17 and 60 ($M = 21.00$, $SD = 4.66$) who were enrolled in associate and undergraduate programs at a public university in Türkiye. Eighteen of the participants were male, and 94 were female. All participants were citizens of the Republic of Türkiye.

Prior to the main analyses, data screening procedures were conducted. Five participants were excluded from the dataset due to issues such as outliers and failing attention checks, and the final sample consisted of 112 participants.

Although an a priori power analysis was not conducted, the sample size was determined based on common practices in experimental social psychology research and previous imagined contact studies, which typically employ sample sizes of approximately 40–60 participants per condition. In the present study, we aimed to recruit at least 50 participants per experimental condition (i.e., experimental vs. control), which is generally considered adequate to detect medium-sized effects in between-group designs (e.g., Cohen, 1992). The sample characteristics and participant distribution across time points and condition are presented in Table 1.

Table 1. Sample Characteristics and Participant Distribution Across Time Points and Conditions

	Time 1 (Total)	Time 2 (Total)	Experimental	Control	Time 3 (Total)	Experimental	Control
N	112	96	52	44	76	42	34
Age (M, SD)	21.00 (4.66)	–	–	–	–	–	–
Gender (Male)	18	16	9	7	15	8	7
Gender (Female)	94	80	43	37	61	34	27

Note: Age was measured at Time 1. Participant attrition occurred across measurement points; therefore, sample sizes differ across time.

Data Collection Tools

Personal Information Form. The Personal Information Form was used to collect information about the participants' gender, age, department of education, ethnic identity, nationality, and socioeconomic status.

Emotion Thermometer. This measurement tool (Haddock et al., 1993; as cited in Özkeçeci, 2017) assessed participants' general feelings about Syrian migrants using a single question. To assess the participants' level of emotion about Syrian migrants, the question "If you were to express your feelings towards Syrian migrants with a single answer, what would you say? Think of your answer as a thermometer" on a scale ranging from 0 (Very Cold - Very Negative) to 10 (Very Hot - Very Positive) was presented. Higher scores indicate higher positive sentiment towards Syrian migrants.

Social Distance Scale. The Social Distance Scale developed by Bogardus (1925; cited in Balaban, 2013) was adapted into Turkish by Balaban (2013). The scale is a measurement tool designed to determine individuals'

attitudes towards social interactions with members of different groups. This scale aimed to determine the participants' attitudes towards various types of interactions with Syrian immigrants. Some of the statements in the scale are "If you had a Syrian boss", "If you lived on the same street with a Syrian", and "If you worked in the same place with a Syrian". The responses to the items on the scale include a 7-point Likert scale ranging from 1 (I am not bothered at all) to 7 (I am very bothered). Higher scores on the scale indicate a higher level of social distance towards the target group. In the study, the Cronbach Alpha reliability coefficient for the scale was calculated as .92 at Time 1, .94 at Time 2, and .93 at Time 3.

Implicit Association Test. The Implicit Association Test, developed by Greenwald et al. (1998), is designed to implicitly measure attitudes and prevent situations frequently encountered in explicit measurement tools, such as social anxiety and favorability. The Implicit Association Test was adapted into Turkish by Şenyurt et al. (2020) In this study, the Implicit Association Test adapted into Turkish by the researchers was adapted to the sample and the current research. This study prepared the Implicit Association Test through the PsyToolkit Program (Stoet, 2010; 2017). This test was administered in 4 blocks in total. In the first block (Name Block), the participants were asked to categorize 16 names, 8 in Arabic and 8 in Turkish. In other words, they were asked to match the name in the centre of the screen with one of the categories, "Syrian" on the right or "Turkish" on the left. In the second block (Adjective Block), participants were asked to evaluate eight good and eight bad adjectives and assign them to the Good and Bad categories. The third block was prepared as the Compatible Block. In the Compatible Block, the words Turkish-Good and Syrian-Bad were presented to the participants, and they were asked to categorize the nouns and adjectives. The last block was prepared as the Incongruent Block. In this block, Turkish-Bad and Syrian-Good words were presented to the participants one below the other, and they were asked to categorize the nouns and adjectives. The Implicit Association Test assumes that the participant's reaction time to the incongruent block will be longer than their reaction time to the congruent block (Şenyurt et al., 2020). In this context, the participants' reaction time to each block was evaluated. The Implicit Association Test was analyzed with D-Score calculations. D-Score was calculated as follows: $\text{Incongruent Block/Incongruent Block Standard Deviation} - \text{Congruent Block/Congruent Block Standard Deviation}$. The higher the scores obtained from this test, the higher the implicit bias.

Prejudice Against Asylum Seekers Scale. This scale, developed by Anderson (2018) and adapted into Turkish by Sarıkaya and Güner (2021), consists of 11 items in total. "Asylum seekers should go back to where they came from", "Asylum seekers cannot adapt to our society", "It is very dangerous for asylum seekers to be in our country", "Asylum-seekers need help, but there are people in our country who need this help more" are some of the items on the scale. The ratings to these items are made on a 7-point scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Exploratory Factor Analysis conducted by Sarıkaya and Güner (2021) found that this scale exhibited a unidimensional structure with 11 items and explained 47% of the total variance. High scores on the scale indicate a high level of prejudice against Syrian immigrants. In the current study, the Cronbach Alpha reliability coefficient of the scale was calculated as .72 at Time 1, .79 at Time 2 and .84 at Time 3.

Imagined Contact Scenario at Time 2 and Control Group Instruction. A scenario was prepared for participants in the imagined contact condition. According to the scenario, participants were asked to imagine that they met a Syrian immigrant individual, spent a significant amount of time together, collaborated toward a common goal (i.e., performing a play representing their university at a theatre festival), had equal status (as students of the same university), and developed a friendly relationship. While constructing this scenario, theoretical frameworks of intergroup contact proposed by Allport (1954) and Pettigrew (1998) were taken into account. In addition, the university context was used to emphasize a shared "we" identity, drawing on principles from Social Identity Theory.

The scenario consisted of 326 words and was presented to participants both as a written text and as an audio recording delivered via headphones. Participants were instructed to follow the written text while listening to the audio. The development of the scenario involved expert evaluation: after the initial draft was created, it

was reviewed by three academics (two specializing in social psychology and one in experimental psychology), and revisions were made in line with their feedback to ensure clarity and theoretical adequacy. Following exposure to the scenario, participants completed manipulation check questions.

In terms of procedure, the imagined contact task lasted approximately 3 minutes. In the control condition, participants were instructed to imagine a neutral situation for approximately 1 minute. Due to differences in the length and content of the scenarios, the duration of the imagined contact task was longer than that of the control condition.

Crisp and Husnu's (2011) guidelines were followed to instruct the control group participants. They were instructed to think about going for a walk outdoors, for 1 minute. This instruction was presented to the participants on a piece of paper. After this instruction, the participants were asked to answer the manipulation control questions about the vividness and detailedness of the imagined scene.

Manipulation Check. In this study, manipulation control questions were asked to test whether the imagined contact scenario was understood correctly. The participants in the experimental group were asked the following questions: "Who is Alaa, and where is he from?" "Which of the following describes the context of your relationship with Alaa more accurately according to the scenario?" and "Which of the following better reflects your relationship with Alaa according to the scenario?". For these questions, participants selected from multiple-choice options. The correct responses indicating successful manipulation were "a Syrian student" for Alaa's identity, "cooperation" for the context of the relationship, and "warm" for the nature of the relationship.

Procedure

Ethics committee approval for this study was obtained from at public university in Türkiye (Ethics committee approval date and approval number: 12/07/2021-62). In the study, measurements were taken from two different groups, the control and the experimental groups, at three different times. In this study, a 2 (Group: experimental group-control group) x 3 (Time: Time 1, Time 2, and Time 3) mixed repeated measures ANOVA design was used. The study design is presented in Table 2.

Table 2. Research design

	Time 1	Time 2	Time 3
Experimental Group	Explicit and Implicit Attitudes	Imagined Contact + Explicit and Implicit Attitudes	Explicit and Implicit Attitudes
Control Group	Explicit and Implicit Attitudes	Explicit and Implicit Attitudes	Explicit and Implicit Attitudes

The first of these measurements was considered a pre-test measurement, and the attitudes of the experimental and control groups towards immigrants were examined. Time 1 measurement was conducted between October 9-13, 2023. The Time 1 measurement was the pre-test phase, and each participant was exposed to the same measurement tools. In this context, the participants were first presented with the Informed Consent Form prepared through PsyToolkit. After the participants read the consent form and expressed their willingness to participate in the study, they were presented with the Implicit Association Test. After the Implicit Association Test, the Personal Information Form, Emotion Thermometer, Social Distance Scale, and Prejudice Against Asylum Seekers were presented respectively.

One week after the pre-test measurement, the participants in the experimental group were presented with an imagined contact scenario. In the second step of the study, participants were assigned to the experimental and control groups. Time 2 measurement was conducted between October 16-20, 2023. The group to which the study participants would be assigned was determined by random assignment (using the SPSS Select Case command). The 112 participants who participated in the Time 1 measurement were contacted, and appointments were made for the days and times the participants were available within the specified week.

Ninety-six of these participants expressed their willingness to participate in the second measurement of the study. Of the ninety-six participants, 52 were assigned to the experimental group and 44 to the control group. Within the study's scope, the experimental group participants were presented with an imagined contact scenario after the Informed Consent Form. The imagined contact scenario was given to the participants as a written text and audio recording. This audio recording lasted approximately 3 minutes and was played to the participants with headphones. The participants in the experimental group were given the following instruction: "Now we are going to play an audio recording for you. I ask you to follow the text in your hand simultaneously while listening to this audio recording". After the participants listened to the audio recording and read the script, data were collected with the measurement tools prepared through the PsyToolkit Program as in the first measurement. In this context, the participants were first asked the Manipulation Control Questions and then the Implicit Association Test was administered. The participants then completed the Emotion Thermometer, Social Distance Scale, and Prejudice Against Asylum Seekers Scale, respectively. Time 2 measurement, 44 participants in the control group were instructed: "Now we ask you to imagine that you are going for a walk in the open air for one minute. Please try to visualize this scene in your mind in some aspects" (see Crisp and Husnu, 2011). After this instruction, the participants were asked Manipulation Control Questions. Participants then completed the other scales as they were presented to the experimental group.

The third measurement was taken six weeks after the second measurement to test the effect of imagined contact in the long term. The final measurement in this study was conducted from November 29-December 8, 2023. In this previous measurement (Time 3), which was conducted to test whether the effect of the imagined contact scenario persisted, data were collected from 76 participants. The participants in the experimental and control groups were presented with the Implicit Association Test, Emotion Thermometer, Social Distance Scale, Prejudice Against Asylum Seekers Scale, respectively. The study was finalized after this last measurement. The questions of people who wanted more detailed information about the research were answered. At the end of the study, a gift voucher of 500 liras was presented to 3 participants, and the study was terminated.

Data Analysis

Data were analyzed using multivariate analysis of variance (MANOVA) to examine the effect of the experimental condition on the dependent variables across time. Prior to the main analyses, the assumptions of MANOVA were assessed. Normality was evaluated using skewness and kurtosis values, and all variables fell within the acceptable range of -1 to $+1$, indicating no substantial deviations from normality.

The homogeneity of variance-covariance matrices was tested using Box's M test, which was not significant, $F(3, 5938380.95) = 1.687, p = .167$, indicating that this assumption was met. In addition, Levene's test was used to assess the homogeneity of variances.

Despite the non-significant Box's M result, Pillai's Trace was used as the multivariate test statistic due to its robustness to potential assumption violations. Following significant multivariate effects, univariate ANOVAs were conducted to determine which dependent variables contributed to the observed effects. Pairwise comparisons were performed using Bonferroni correction to control for Type I error.

Results

In the current study, measurements were made in three different periods to test the effect of imagined contact on attitudes towards Syrian migrants. Measurements of social distance, general emotion, explicit prejudice and implicit prejudice towards Syrian migrants were taken from the experimental and control groups. The mean and standard deviation values of the variables are presented in Table 3. Table 4 shows the correlation values between the variables.

Table 3. Mean and standard deviation values of variables (all participants)

	N	Rating Scale	Mean	SD
T1 General Emotion	112	0-10	2.31	2.29
T2 General Emotion	92	0-10	2.72	2.34
T3 General Emotion	75	0-10	2.95	2.40
T1 Social Distance	112	1-7	4.55	1.75
T2 Social Distance	92	1-7	4.79	1.75
T3 Social Distance	75	1-7	4.91	1.67
T1 Prejudice	112	1-7	5.54	.79
T2 Prejudice	92	1-7	5.56	.81
T3 Prejudice	75	1-7	5.59	1.04
T1 D-Score	112	-	-.30	.79
T2 D-Score	92	-	.33	.79
T3 D-Score	75	-	-.11	.56

Note: D-Score was calculated as Mean of the Person in the Incongruent Block / Std. Deviation of the Incongruent Block - Mean of the Person in the Congruent Block / Std. Deviation of the Congruent Block within the scope of the Implicit Association Test.

Table 3 shows that the general feeling towards migrants is higher at Time 3 ($M = 2.95$) compared to Time 1 ($M = 2.31$) and Time 2 ($M = 2.72$). Social distance increased over time ($M = 4.55, 4.79, 4.91$, respectively). It is observed that prejudice scores towards immigrants were similar across the three time periods ($M = 5.54, 5.56, 5.59$, respectively). Implicit prejudice was lower at Time 2 (.33) compared to Time 1 (-.30) and Time 3 (-.11).

Table 4. Correlation values between variables (Time 1 measurements)

	1	2	3	4	5	6	7
1. Gender	-						
2. Age	.06	-					
3. General Emotion	.08	-.09	-				
4. Social Distance	-.12	.12	-.70**	-			
5. Implicit Prejudice	.14	.16	-.00	-.00	-		
6. Explicit Prejudice	-.12	-.05	-.55**	.47**	.10	-	
7. SES	-.18	.20*	-.08	.14	-.003	.03	-

N: 112, SES: Socio-economic status, ** $p < .01$, * $p < .05$

When Table 4 is examined, it is seen that there is a significant negative correlation between general emotion towards immigrants and social distance (-.70) and explicit prejudice (-.55). As expected, there is a significant positive correlation (.47) between social distance and explicit prejudice.

Manipulation Check

In order to test whether the participants in the experimental group paid attention to the important points in the imagined contact scenarios, three questions were asked of the participants. The first of these questions was, "Who is Alaa, and where is he from?". All 50 participants in the experimental group answered this question as "a Syrian student". Secondly, 49 of the participants in the experimental group answered "cooperation" to the question, "Which of the following more accurately describes the context of the relationship between you and Alaa according to the scenario?". Finally, 49 participants answered "warm" to the question, "Which of the following best reflects your relationship with Alaa according to the scenario?".

Experimental Group and Control Group Comparison

In this study, it was predicted that the prejudiced attitudes of the participants in the experimental group would decrease significantly after being exposed to the imagined contact scenario. This effect would continue in the prejudice measurements six weeks later, but there would be no significant difference in the pre-test and post-test scores of the participants in the control group (Hypothesis 1 and Hypothesis 2). In order to test these hypotheses, the Time 1, Time 2 and Time 3 general emotion, social distance, prejudice and implicit prejudice scores of the groups were compared with repeated measures of MANOVA. The Time 1, Time 2 and Time 3 mean scores and standard deviations for each dependent variable are presented in Table 5.

Table 5. Means and standard deviations for the experimental and control groups

	Time 1		Time 2		Time 3	
	Mean	SD	Mean	SD	Mean	SD
Experimental Group						
General Emotion	2.31	2.29	2.90	2.48	2.75	2.41
Social Distance	4.67	1.58	4.82	1.49	5.06	1.40
Implicit Prejudice	-.20	.74	.35	.70	-.02	.53
Prejudice	5.48	.75	5.50	.67	5.62	1.02
Control Group						
General Emotion	2.91	2.29	2.97	2.35	3.18	2.40
Social Distance	4.06	1.84	4.60	2.05	4.72	1.95
Implicit Prejudice	-.43	.80	.36	.90	-.21	.57
Prejudice	5.46	.85	5.53	.98	5.55	1.08

Note: Experimental Group N=41, Control Group N= 34

MANOVA with mixed repeated measures was conducted to test whether there was a significant difference in the social distance, general emotion, implicit prejudice and explicit prejudice levels of the experimental and control group participants towards Syrian immigrants at three different times. According to the results of the analysis of variance, the main effect of time on the dependent measures was significant (*Pillai's Trace* = .36, $F(8, 288) = 7.94$, $p = .001$, *partial* $\eta^2 = .18$). However, according to the analysis results, Time*Group joint effect was not significant (*Pillai's Trace* = .032, $F(8, 288) = .58$, $p = .79$, *partial* $\eta^2 = .016$). In this context, Hypothesis 1 and Hypothesis 2 are not supported. The results of the variance analysis are presented in Table 6.

Table 6. Variance analysis results of the experimental and control groups' general emotions, implicit prejudice, prejudice and social distance levels towards syrian immigrants in different periods

Source of Change	Total Squares	Sd	Mean Square	F	P	<i>partial</i> η^2
Time						
Implicit Prejudice	17.75	2	8.87	18.77	.00	.205
General Emotion	5.66	2	2.83	2.47	.08	.033
Social Distance	10.60	2	5.30	7.34	.001	.091
Prejudice	.55	2	.28	1.08	.34	.015
Time*Group						
Implicit Prejudice	.60	2	.30	.63	.53	.009
General Emotion	2.67	2	1.34	1.17	.31	.016
Social Distance	1.45	2	.72	1.00	.37	.014
Prejudice	.11	2	.05	.21	.81	.003
Error (Time)						
Implicit Prejudice	69.02	146	.47			
General Emotion	167.08	146	1.14			
Social Distance	105.35	146	.72			
Prejudice	37.58	146	.26			

Note. * $p < .05$

According to the analysis of variance, there is a significant difference in the implicit prejudice scores of the participants over time ($F(2, 146) = 18.77, p = .001, \text{partial } \eta^2 = .205$). Bonferroni's comparison shows that the implicit bias level at Time 1 ($M = -.317, SD = .089$) was significantly lower than that at Time 2 ($M = .356, SD = .093$). The implicit bias at Time 2 was significantly higher than that at Time 3 ($M = -.119, SD = .064$). The change in the level of implicit bias over time is shown in Figure 1. As a result of the analysis, it was found that the interactional effect of time and group variables was not significant.

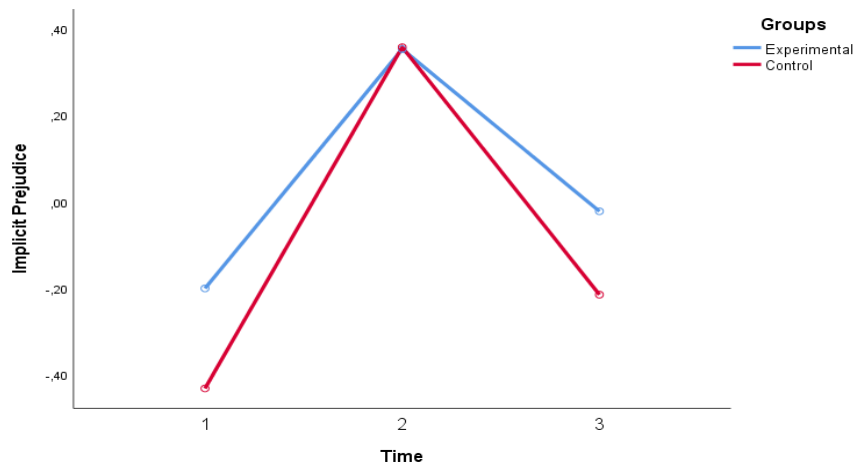


Figure 1. Change in implicit prejudice with time

According to the univariate analysis of variance results, the main effect of time on social distance was significant ($F(2, 146) = 7.34, p = .001, \text{partial } \eta^2 = .091$). According to the Bonferroni comparison results, the participants' social distance level at Time 1 ($M = 4.36, SD = .20$) was significantly lower than the social distance level at Time 2 ($M = 4.71, SD = .20$). Social distance at Time 3 (Mean = 4.89, $SD = .19$) was significantly higher than social distance at Time 1 ($M = 4.36, SD = .20$). There was no significant difference between Time 2 and Time 3 social distancing levels. The change in participants' social distance levels across time is shown in Figure 2. It was found that the joint effect of time and group variables on social distance was insignificant.

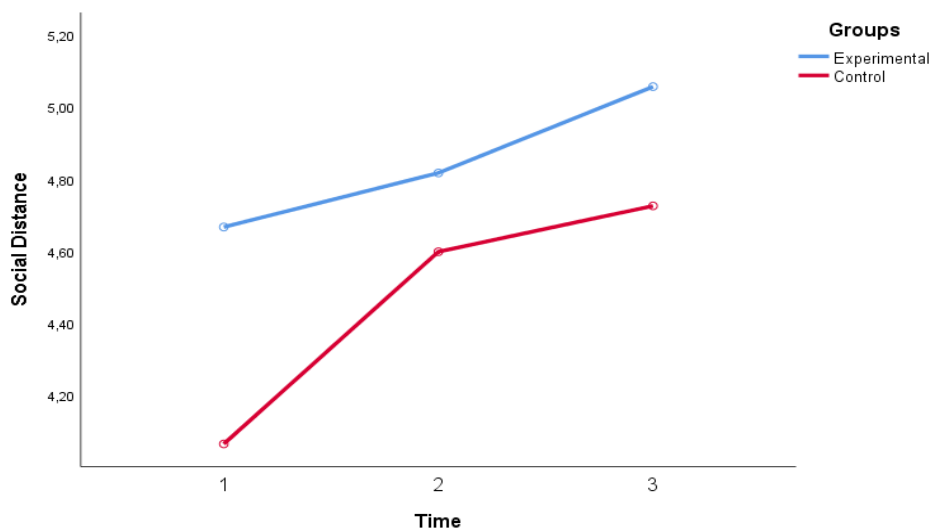


Figure 2. Change in social distance with time

According to the analysis of variance, the main effect of time on general emotion was insignificant ($F(2, 146) = 2.47, p = .088, \text{partial } \eta^2 = .033$). The joint effect of time and group variables on general emotion was also insignificant ($F(2, 146) = 1.17, p = .31, \text{partial } \eta^2 = .016$). According to the analysis of variance, the main effect of time on explicit prejudice was insignificant ($F(2, 146) = 1.08, p = .34, \text{partial } \eta^2 = .015$). Similarly, it was determined that the time*group joint effect did not significantly affect prejudice ($F(2, 146) = .21, p = .81, \text{partial } \eta^2 = .003$)

Discussion

The present study examined whether imagined contact reduces explicit and implicit prejudice toward Syrian immigrants and whether such effects persist over time. Contrary to expectations, imagined contact did not lead to significant differences between the experimental and control groups in terms of general emotions, social distance, explicit prejudice, or implicit prejudice. These findings suggest that a single imagined contact intervention may be insufficient to reduce entrenched negative attitudes toward Syrian immigrants in the Turkish context.

Overall, participants in both groups exhibited highly negative baseline attitudes toward Syrian immigrants. This finding is consistent with previous research conducted in Türkiye, which has repeatedly documented elevated levels of prejudice, social distance, and threat perception toward Syrian migrants (e.g., Alikılıç et al., 2021; Bayram, 2021; Çetin & Demirel, 2023). From this perspective, the high level of initial prejudice may have constrained the potential effectiveness of imagined contact, particularly when implemented as a one-time intervention.

These results can be interpreted within the framework of scapegoating and threat-based approaches to prejudice. Syrian migrants in Türkiye are frequently perceived as economic, cultural, and symbolic threats, particularly during periods of economic instability (Arslantürk, 2020; Stephan & Stephan, 2000). In such contexts, imagined contact may be less effective, as deeply rooted threat perceptions and social dominance motivations can override the potential benefits of indirect contact. Supporting this interpretation, previous studies have shown that imagined contact effects are weakened in contexts characterized by high ingroup identification, strong threat perceptions, or intense intergroup conflict (Bagci et al., 2018a; Bagci et al., 2018b; Hoffarth & Hodson, 2016).

Consistent with these findings, several studies conducted in Türkiye and other high-prejudice contexts have reported null or limited effects of imagined contact on both explicit and implicit attitudes (e.g., Dermody et al., 2013; Fırat, 2019; Aksoy, 2023). Together, these findings suggest that the effectiveness of imagined contact is contingent on contextual and individual-level factors, such as the sociopolitical climate, the status of the outgroup, and participants' ideological orientations. Future research may benefit from combining imagined contact with interventions targeting threat perception, social dominance orientation, or ingroup identification.

Another explanation for the null findings may be the limited dosage of the intervention. Prior research indicates that repeated imagined contact sessions are more effective than single exposures in reducing prejudice (e.g., Stathi et al., 2014; Vezzali et al., 2012). Given the high levels of prejudice observed in the present sample, a single imagined contact scenario may not have been sufficient to produce measurable attitudinal change. Future studies should examine the cumulative effects of repeated imagined contact sessions, particularly in high-prejudice contexts.

Although imagined contact did not differentially affect prejudice across groups, a significant main effect of time was observed for social distance and implicit prejudice, with scores increasing over time. This unexpected finding may be attributable to priming effects associated with repeated measurement. Exposure to prejudice-related measures at the pre-test stage may have heightened participants' cognitive accessibility of existing negative attitudes, leading to their increased expression in subsequent measurements. Similar priming and

reactivity effects have been documented in prior research on intergroup attitudes and prejudice-related constructs (e.g., Kaya, 2018; Li, 2019).

In addition to measurement-related explanations, broader sociopolitical factors may also have contributed to the observed increase in social distance and implicit prejudice over time. The data for this study were collected in 2023, a period marked by national elections in Türkiye, during which public and media discourse surrounding immigration—particularly Syrian migrants—became more salient and, at times, more negative. Increased exposure to such discourse may have reinforced existing prejudices or heightened threat perceptions, thereby contributing to the observed rise in negative attitudes across measurement points. This possibility highlights the importance of considering macro-level contextual influences when interpreting longitudinal changes in intergroup attitudes.

An alternative explanation involves cognitive consistency processes. Participants may have experienced a psychological need to maintain consistency across measurement points, resulting in the reinforcement or clarification of their existing attitudes toward Syrian immigrants. Research on cognitive dissonance suggests that individuals strive for attitudinal consistency, particularly when their attitudes are salient or repeatedly assessed (Acharya et al., 2018; Conner et al., 2021). In this context, participation in a study explicitly focused on prejudice may have amplified participants' awareness and expression of their pre-existing attitudes.

Despite these limitations, the present study contributes to the imagined contact literature by examining both explicit and implicit prejudice using a longitudinal design. Unlike many previous studies that rely solely on explicit measures, the inclusion of implicit attitudes allowed for a more comprehensive assessment of prejudice while reducing potential social desirability effects. The findings highlight the importance of considering contextual constraints and boundary conditions when evaluating the effectiveness of imagined contact interventions.

In conclusion, the results indicate that prejudice toward Syrian immigrants in the current sample was highly resistant to change and that imagined contact alone may not be sufficient to reduce such entrenched attitudes. These findings suggest that more comprehensive intervention strategies—potentially combining imagined contact with approaches targeting threat perceptions, social identity processes, or repeated engagement—may be necessary to effectively reduce prejudice toward immigrants in high-conflict contexts.

Limitations and Recommendations

This study has several limitations that should be considered when interpreting the findings. First, the imagined contact scenario was presented as an audio recording accompanied by written text, which may have increased participants' cognitive load and limited their ability to vividly engage with the scenario. Relatedly, the strength of the experimental manipulation may have been insufficient to elicit a meaningful cognitive or emotional response. Although the scenario was developed based on established theoretical frameworks and refined through expert feedback, and participants completed manipulation check questions, the absence of significant differences between the experimental and control groups suggests that the manipulation may not have produced a sufficiently strong experiential impact to influence prejudice-related outcomes. Prior research indicates that the effectiveness of imagined contact depends on factors such as vividness, emotional engagement, and perceived realism. In line with this, future studies may benefit from employing alternative or enhanced procedures—such as guided imagery, writing tasks following the imagined interaction (e.g., Firat, 2019; Küçükkömürler, 2013), or repeated sessions—to strengthen the impact of the manipulation and compare the effectiveness of different implementations.

Second, the use of a pretest–posttest design raises the possibility of familiarity and reactivity effects, particularly in repeated measurements. Although additional analyses suggested that changes in Implicit Association Test scores were unlikely to be driven by familiarity effects, repeated exposure to prejudice-related measures may still have influenced participants' responses. Future studies should consider incorporating alternative measurement strategies or controlling for potential testing effects when using longitudinal designs.

Another limitation concerns the characteristics of the sample. The participants were predominantly female undergraduate students aged 18–22 from the same faculty and department, which limits the generalizability of the findings. Moreover, participants' familiarity with one another may have increased the likelihood of discussion about the study between measurement points, potentially influencing post-test responses. Future research should aim to include more diverse samples in terms of gender, age, educational background, and socioeconomic status, as well as recruit participants from different institutions.

The effectiveness of imagined contact may also vary depending on the level of real intergroup contact in the social environment. Conducting similar studies in contexts where Syrian migrants are more visible and opportunities for direct contact are higher—such as schools or regions with a high concentration of migrant populations—may yield different results. In such contexts, imagined contact may function more effectively as a complement to real contact rather than as a standalone intervention. Examining imagined contact across different age groups, particularly among middle and high school students, may further clarify how developmental and contextual factors shape its effectiveness.

Despite these limitations, the present study contributes to the imagined contact literature by demonstrating that prejudice toward Syrian immigrants in the current sample was highly resistant to change and by highlighting the potential priming effects of participating in prejudice-related research. The inclusion of both explicit and implicit measures across three time points represents a methodological strength. Overall, the findings suggest that imagined contact alone may be insufficient to reduce deeply entrenched prejudice and that future interventions may benefit from combining imagined contact with repeated exposure and opportunities for direct, positive intergroup contact.

Conclusion

The present study examined the effectiveness of imagined contact in reducing explicit and implicit prejudice toward Syrian immigrants in Türkiye and assessed whether such effects persisted over time. Contrary to expectations, imagined contact did not produce differential changes in prejudice between the experimental and control groups. These findings suggest that, in contexts characterized by high baseline prejudice and limited opportunities for positive intergroup contact, a single imagined contact intervention may be insufficient to generate meaningful attitudinal change.

At the same time, the results highlight the robustness and resistance of negative attitudes toward Syrian immigrants in the current sample. The observed changes in social distance and implicit prejudice over time— independent of the experimental manipulation—underscore the potential influence of contextual, cognitive, and measurement-related factors, such as priming and attitudinal consistency. These findings contribute to a growing body of literature emphasizing the boundary conditions under which imagined contact is more or less effective.

Despite the null effects of imagined contact, this study offers important theoretical and methodological contributions. By incorporating both explicit and implicit measures of prejudice across three time points, the study provides a more nuanced assessment of intergroup attitudes and their temporal dynamics. The findings also extend imagined contact research to a non-Western, high-prejudice context, addressing a notable gap in the literature.

Overall, the present study suggests that reducing prejudice toward Syrian immigrants may require more comprehensive and sustained interventions. Imagined contact may be more effective when implemented repeatedly, combined with strategies targeting threat perceptions and social identity processes, or integrated with opportunities for direct positive intergroup contact. Future research should continue to explore multi-component approaches to prejudice reduction, particularly in contexts marked by entrenched intergroup tensions.

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