Confronted with the Prejudice Paradox:

Its Effects on Prejudice via a Cognitive Dissonance and Compassion Route

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Abstract

Whether immigrants do or do not assimilate to Western meritocratic values, they are met with disapproval either way. Previous research has dubbed this phenomenon the Prejudice Paradox. However, it is yet unknown what happens when people are made aware of this paradox. Therefore, this research aims to study whether prejudice towards immigrants can be lowered by making people aware of the sometimes-conflicting beliefs that are held about immigrants. More specifically, this study focuses on the immigrant group, Chinese students. The intervention was expected to work via two different pathways: a more self-focused pathway including cognitive dissonance and a more other-focused pathway including perceived unfairness and compassion. Prior prejudice was expected to moderate both pathways. The hypotheses were tested using an experimental between-subjects design with three different conditions in an online survey ($n = 257$) of first-year psychology students. The results indicated that confronting people with the prejudice paradox did not lead to significantly different levels of prejudice and discriminatory behaviour than being confronted with non-contradicting prejudiced beliefs. Contrary to our expectations, all conditions resulted in equal levels of cognitive dissonance, perceived unfairness, and compassion. Each of these variables did significantly negatively predict prejudice and discriminatory behavioural intentions. No support was found for either the self-focused or other-focused pathways as a whole. However, the compassion part of the other-focused pathway with prior prejudice as the moderator was significant. Instead of lowering prejudice, confronting people with the prejudice paradox increased it, suggesting that ingroup influence was more impactful than our attempt to reduce prejudice.

Keywords: Prejudice Paradox, Intervention, Compassion, Cognitive Dissonance, Conflicting Beliefs

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Whether immigrants do or do not assimilate to Western meritocratic values, they are met with disapproval either way. Some of the concerns regarding non-assimilation are that the immigrants will depend on social welfare (Hainmueller & Hiscox, 2010), pose a safety threat (Turper, 2017), and weaken national values (Burhan & Leeuwen, 2016; Esses, 2021). However, when immigrants *do* assimilate, they are faced with employment discrimination and are thought to take away jobs from natives (Esses, 2021). Previous research has dubbed this phenomenon the Prejudice Paradox (van der Linden & Spears, 2016). But what would happen if people were made aware of this paradox? This research aims to study whether prejudice towards immigrants can be lowered by making people aware of the sometimes-conflicting beliefs that are held about immigrants. More specifically, we will try to lower prejudice towards the immigrant group, Chinese students, by making this paradox salient.

To our knowledge, no previous research has investigated what happens when people are made aware of the Prejudice paradox. However, this is valuable information, seeing that people are exposed to conflicting prejudiced arguments in daily life, for example, via television and social media. This study could help us further understand how people form attitudes about immigrants and specify the prejudice paradox's mechanisms. In addition, it could provide more general information about what people do in the face of conflicting arguments. Besides theoretical relevance, this line of research is necessary because it could lead to fruitful prejudice-reducing interventions, improve existing interventions, or prevent well-intended but potentially harmful interventions from taking place.

Prejudice

Prejudice is having an attitude towards someone that devalues them on the basis of the social group or category they belong to, often to benefit the self or own group (Spears &

Tausch, 2015). Whereas prejudice is concerned with feelings, stereotypes are beliefs and opinions one has about the characteristics and behaviours of a particular social group (Kite & Whitley Jr., 2016). Being aware of stereotypes does not necessarily mean someone is prejudiced since people can hold stereotypes of the ingroup too (Devine, 1989; Turner et al., 1994). The ingroup is the group one belongs to, while the outgroup is the group one does not belong to. When people treat others differently (typically negatively or less positively than the ingroup) because of the social group the belong to, disregarding their individual characteristics, this is called discrimination (Kite & Whitley Jr., 2016).

Studying prejudice interventions is important because prejudice can harm both the targets and society as a whole. For example, prejudices and stereotyping can make it harder for immigrants to find a house or a job (Esses, 2021). On a more psychological level, discrimination is related to increased stress levels, lower well-being, anxiety, lower academic achievements, and depression, among other things (as summarised by Kite and Whitley (2016)). At a societal level, discrimination can also cause harm. For example, employment discrimination could lead to economic losses due to underutilised labour. This is likely the case for many skilled immigrants moving to Western countries (Esses, 2021). In sum, prejudice can lead to a range of adverse outcomes.

Several theories exist that try to explain why prejudice occurs, despite the negative consequences for the recipients or society. Realistic conflict theory (Sherif, 1956) states that people are prejudiced towards other groups because they are competing for resources. Therefore, competition is more likely to arise when the resources are perceived to be in short supply. Intergroup threat theory (Stephan et al., 2005) states that prejudice can also result from perceived competition over cultural resources besides material resources, for example, over which ideology should prevail (Rios et al., 2018). Perceived competition over cultural resources is referred to as symbolic threat, while perceived competition over material

resources as realistic threat. The theorising behind the Prejudice Paradox is based on both realistic conflict theory (Sherif, 1956) and intergroup threat theory (Stephan et al., 2005).

The Prejudice Paradox

The prejudice paradox (van der Linden & Spears, 2016) states that immigrant groups are met with prejudice both when they do and do not assimilate to a society with Western meritocratic values. Meritocracy is the ideology of a society whereby everyone has equal opportunities. Instead of one's social class, social category or luck (Testé et al., 2012), success depends on hard work and talent (Chang-Hee & Yong-Beom, 2017). If immigrants were to assimilate to Western meritocratic values, it would thus mean that they would share the same values, work hard and strive for success. At the same time, non-assimilation would be linked to untalented or unmotivated immigrants with different values.

Assimilation and non-assimilation are believed to evoke different types of realistic and symbolic threats (van der Linden & Spears, 2016). For example, assimilation could evoke the realistic threat of being in competition for jobs and the cultural threat of being too similar thereby challenging the social hierarchy (as summarized by Testé et al., 2012), which we will call competition and similarity threat from now on. On the other hand, non-assimilation could evoke the realistic threat of being a (financial) burden to society and the cultural threat of undermining the values of the host society (Hainmueller & Hiscox, 2010), which we will now call burden and dissimilarity threat. Thus, whether immigrants do or do not assimilate, they are believed to elicit realistic and symbolic threat.

Even though immigrants are believed to face prejudice both when assimilating and not assimilating, the first is usually preferred by the host society (Testé et al., 2012; Turper, 2017; van der Linden & Spears, 2016). This could be explained by non-assimilating immigrants evoking more cultural threat than assimilating immigrants (van der Linden & Spears, 2016). In addition, burden threat (associated with non-assimilation) was found to weigh heavier than

competition threat (associated with assimilation) (Testé et al., 2012). Indicating that overall, non-assimilation is perceived as more threatening.

Conflicting Beliefs

Although it is called the prejudice *paradox,* meaning an apparent contradiction*,* we believe it can sometimes be truly contradicting. Van der Linden & Spears (2016) proclaimed it to be a paradox since different groups in society can hold different prejudiced attitudes towards a single immigrant group, such as high-status versus low-status groups. It could also be explained as a paradox by stating that people have different prejudiced beliefs towards different immigrant groups. However, people are known to be able to hold contradicting beliefs on an individual level (Douglas et al., 2019; Swidler & Hojjat, 2003). Therefore, for some people, the prejudice paradox could be truly contradictory instead of a paradox. Even if individuals do not hold contradicting beliefs themselves, the beliefs of the ingroup about an outgroup as a whole can still be conflicting from the perspective of the outgroup. This is the case when critiquing the same immigrants both for assimilating and not assimilating. The prejudice paradox (van der Linden & Spears, 2016) could thus be contradicting, as opposed to paradoxical, on an individual or group level.

Cognitive dissonance theory (Festinger & Aronson, 1997) states that people are motivated to alter their beliefs, attitudes, or behaviour when they notice a discrepancy between them. The motivation stems from the uncomfortable feeling that arises from noticing an inconsistency. Therefore, based on cognitive dissonance theory, once an individual recognises that they have conflicting prejudiced beliefs, this should motivate them to remove or alter a prejudiced belief to make it consistent.

Besides eliciting cognitive dissonance, contradicting views could also be perceived as unfair towards the target group since not both views can be true. Perceived unfairness is, in turn, expected to provoke compassion towards the target group. Compassion can be defined

as an emotion that results from recognising suffering (Meerholz, 2017). Existing interventions have found inducing compassion to be an effective way to reduce prejudice (Berger et al., 2018; Hunsinger et al., 2014; Sinclair et al., 2016), although it can, in some instances, also undermine helping behaviour (Meerholz, 2017).

The initial amount of prejudice people have is expected to influence what people do in the face of conflicting prejudiced views. It is expected that those with high prior prejudice will be motivated not to see the prejudice paradox as contradicting to avoid the uncomfortable feeling that accompanies inconsistency (Festinger & Aronson, 1997). However, when they do not perceive supposedly contradicting prejudiced beliefs as contradicting, it could be seen as a cumulative reason for prejudice.

Current Research

The current research will focus on the immigrant group of Chinese students specifically. This group is chosen because they are thought to be able to evoke the contradicting realistic threats of being a financial burden to society as well as forming competition career-wise. In addition, they are thought to be able evoke the contradicting symbolic threats of being too culturally different as well as too similar. Using this immigrant group thus provides the potential to make the prejudice paradox seem truly contradicting in the context of this immigrant group. Moreover, this group is relevant because discrimination towards people of Chinese descent is prevalent in the Netherlands (Artikel 1, 2021). Therefore, the research question is as follows: Does confronting Dutch students with conflicting prejudiced beliefs about Chinese students reduce prejudice towards Chinese students?

Becoming aware of conflicting prejudiced beliefs about Chinese students is expected to lower prejudice towards Chinese students in Dutch students (*Hypothesis 1*). The intervention is expected to work via two different routes: a more other-focused and a more self-focused route. Via the more self-focused route, the intervention is expected to lower prejudice by

generating the experience of cognitive dissonance (*Hypothesis 2*). Being confronted with the prejudice paradox could make people realise that they also hold conflicting beliefs about Chinese students. The uncomfortable feeling resulting from this inconsistency is expected to motivate people to change their beliefs (Festinger & Aronson, 1997) and, therefore, lower prejudice. It is thus named the self-focused route since it is focused on internal inconsistencies.

Via the more other-focused route, the intervention is expected to lower prejudice by increasing compassion for Chinese students (*Hypothesis 3*). This is in accordance with previous research (Berger et al., 2018; Hunsinger et al., 2014; Sinclair et al., 2016). It is named the other-focused route since it is focused on how others are treated. Compassion is expected to increase due to perceiving the contradicting beliefs towards Chinese students as unfair (*Hypothesis 4*). The contradicting beliefs could be perceived as unfair and unjust because it shows that students have a double standard. Since acknowledging an inconsistency in one's attitudes or beliefs accompanies an uncomfortable feeling (Festinger & Aronson, 1997), it is expected that those with high prior prejudice towards Chinese students will be motivated to see the prejudiced beliefs as consistent as opposed to inconsistent. Therefore, it is expected that people with higher prior prejudice levels are less likely to experience cognitive dissonance and perceive the arguments as unfair (*Hypothesis 5*).

Method

Participants

The participants were Dutch, first-year psychology students from the University of Groningen. The average age was 19,9 (*SD* = 1.95) and the ratio male-female was 25% to 75% respectively. The participants were sampled using online platform exclusive to this group where they can sign up as research participants in exchange for course credits. They are free to choose whether they want to participate in a study, but their choice is limited given the

number of credits needed to complete the course. Therefore, the risk of self-selection is limited. Data was collected from March 1 until May 27, 2022. The study was approved by the Ethics committee beforehand.

The intended sample size was about 300 participants. The study consisted of three conditions with moderators. Therefore, it was estimated that about 100 participants were needed per condition. Since this was the first study of its kind, this number was based on being able to find a weak effect. Eventually, the number of participants signing up for the study was 288, of which 257 were used in the data analysis. Only participants that did not complete the survey and therefore had not given their informed consent were excluded.

Design

The study design was an experimental 3 (Condition: experimental/contradiction vs assimilation control vs non-assimilation control) x moderator (prior prejudice) between-subject design with two mediating pathways. The participants were randomly assigned to one of three conditions automatically once they started the survey, of which two were control conditions. The manipulation was whether participants read conflicting or compatible prejudiced statements about Chinese students and whether these statements reflected assimilation or non-assimilation of Chinese students to Western meritocratic values. In the experimental condition, the participants viewed contradicting prejudiced statements reflecting both assimilation and non-assimilation. The statements in the control conditions were not contradicting and reflected either assimilation or non-assimilation. The mediators were cognitive dissonance, perceived unfairness of the statements, and compassion for Chinese students. The moderator was prior prejudice towards Chinese students. The dependent variables were prejudice and discriminatory behavioural intentions towards Chinese students.

Procedure

The study was administered online using a Qualtrics questionnaire. Once the

participants signed up for the study, they were first asked to read the informed consent. They were led to believe that the University of Groningen is exploring the option again of collaborating with a Chinese university and therefore is interested in the support for this among students. After having given their consent, they were asked to read a cover story (See Appendix A for the full cover story). They were truthfully informed of the earlier plans of the University of Groningen to collaborate with a Chinese University. In addition, they received more information about the constructed new collaboration. They were told that the University of Groningen had already conducted several focus groups with students about this. We deemed the bogus cover story necessary because it would otherwise undermine assignment to experimental conditions and increase the chances of demand characteristics and social desirability. After reading the cover story, their prior prejudice level towards Chinese students was assessed, followed by the manipulation. They were asked to read the most representative statements of fellow students collected during the focus groups. For credibility, the first two arguments favour collaboration with a Chinese university. Depending on the condition the participants were assigned, they were shown different arguments against the collaboration, reflecting prejudiced statements about Chinese students. They were then presented with a weak manipulation check to infer whether they had read the statements thoroughly. If they failed the weak check, they were again presented with the statements. Afterwards, their post prejudice level was assessed, followed by discriminatory behavioural intentions towards Chinese students. Next, cognitive dissonance was measured in combination with the perceived unfairness of the statements. After that, compassion towards Chinese students, stereotyping of Chinese students and the perceived contradiction of the statements were measured, respectively. They were then asked for their demographic variables, age and gender followed by their group identification with fellow. At the end of the study, the participants were debriefed about the study's true purpose and were asked for their informed consent once

more.

Materials and Measures

Manipulation

As mentioned, the conditions differed in the content of the prejudiced statements about Chinese students. Only the statements against collaboration with a Chinese university differed, whereas the statements favouring the collaboration remained the same across conditions. For each condition, the statements against a collaboration were sorted by theme. These themes were financial motives, academic skills, and joined classes. For each theme, two statements were provided. In the experimental condition, the statements belonging to the same theme were contradictory. For example, for the theme of academic skills, the statements were: "The work mentality of Chinese students might be too extreme. It would not be fair towards Dutch students to have Chinese classmates that work 24/7; there is no way for students with a social life to keep up with that" and "I think it could be a problem that the level of English of Chinese students is not always very high. It could pose problems in group discussions or group work, at the cost of Dutch students' education." These statements are contradictory since the students' academic skills cannot be too high as well as too low simultaneously. In this condition, for each theme, one statement represents a critique of Chinese students for assimilating to Western Meritocratic values while the other represents a critique for not assimilating. Therefore, this condition is named the contradiction condition. In the control conditions, for each theme, both statements reflected either critique concerning assimilation or non-assimilation. For each theme, one statement always originated from the contradiction condition to ensure that the conditions differed as little as possible with the contradiction condition on non-relevant aspects. For example, in the assimilation control condition, the first-mentioned statement was combined with the statement: "It might be hard for Dutch students to compete with Chinese students for grades, seeing that Chinese students

generally are so focused on getting the highest grade possible for their exams." See Appendix B for an overview of all the statements, including those in favour of collaboration.

The study included two manipulation checks, a weak and a strong check. The weak manipulation check measured whether the participants had read and understood the prejudiced statements. They were asked to answer four multiple-choice questions. An example is: "Are the academic skills of Chinese students too high or too low compared to Dutch students". The participants could select too high, too low, neither applicable or both applicable. The correct answers differed per condition (See Appendix C for an overview of the questions). For the strong manipulation check, participants were asked whether they perceived the statements as contradictory for each theme separately and in general. They could answer using a 7- point bipolar scale ranging from *contradictory* (1) to *consistent* (7) and explain their answer if desired.

Prejudice

Prior and post prejudice towards Chinese students was measured using the same feeling thermometer measure (Sinclair et al., 2016). Participants were asked to use a slider to rate how warm their feeling towards Chinese students was in degrees Celsius ranging from 0° (*cold/negative)* to 100° (*warm/positive*). Two thermometer measures were added, asking how they felt about collaborating with a Chinese university and another university to prevent demand characteristics. To avoid suspicion from having to use the same measure twice, the second time, the participants were explained that they were now informed of the potential pros and cons of collaboration and were therefore asked to fill out the measure again. Higher scores on the measure reflected lower levels of actual prejudice.

Discrimination

Besides post prejudice, the other dependent variable was discriminatory behavioural intentions. This variable was measured by asking whether the participants would be in favour

of a collaboration between the University of Groningen and a Chinese university or another university and whether they would be willing to work with a Chinese student in a group project. Only the last item was used since the first two items do not necessarily reflect discrimination. The answer options ranged from *absolutely not* (1) to *absolutely* (7). They could elaborate on their answer if desired. Higher scores indicated less discriminatory behavioural intentions.

Stereotyping

Stereotyping was measured using the stereotype content model of Fiske et al. (2002). In addition to the warmth ($\alpha = .76$) and competence ($\alpha = .68$) items, the dimensions morality (Leach et al., 2007; $\alpha = .78$) and aggression were added (Leach, et al., 2007; $\alpha = .66$) as well as the self-constructed measures effort ($\alpha = .79$) and sociability ($\alpha = .56$), to reflect Asian stereotypes (Thompson et al., 2016) and the content of the statements that was manipulated. Each dimension consisted of three items. Effort consisted of the items: diligent, hardworking, and ambitious. Sociability consisted of the items: composed, reserved, and shy. The dimensions were presented in a mixed order. Participants were asked to what degree they thought Chinese students possessed the total of 18 different characteristics. They could answer using a 7-point scale ranging from *absolutely not* (1) to *absolutely* (7).

Cognitive Dissonance

Cognitive dissonance was measured by adapting an existing Likert scale (Metzger et al., 2020) that measured cognitive dissonance after having read news items to after having read opinions of Chinese students. One item of the original 9-item scale was excluded because changing it to the new research purpose did not make sense, resulting in an 8-item scale with three reversed items. The scale was designed to include the cognitive as well as the affective component of cognitive dissonance. An example item includes: "I felt uncomfortable while reading the opinions about Chinese students." Instead of a 5-point scale, it was altered to a 7-

point scale with answer options ranging from *strongly disagree* (1) to *strongly agree* (7).

Higher scores indicated greater cognitive dissonance. Overall, the scale was found to be

reliable ($\alpha = .79$).

Perceived Unfairness

Among the items for the cognitive dissonance scale were the items of the perceived

unfairness scale. These scales were combined to conceal what was being measured and

therefore help avoid demand characteristics. An example item is: "I think the opinions are

unreasonable." Instead of the word unreasonable, the other two items were unjust and fair.

The last item was reverse-coded. Higher scores indicated a greater perceived unfairness of the

opinions about Chinese students. The 3-item scale was found to be reliable ($\alpha = .81$).

Compassion

Compassion was measured by adapting an existing scale (Zebel et al., 2009) to fit Chinese

students. The scale had three items and ranged from *strongly disagree* (1) to *strongly agree*

(7). An example item includes: "I feel compassion for Chinese students who come to study in

the Netherlands". Instead of the word compassion, the other two items informed about

sympathy and pity. Higher scores indicated greater compassion for Chinese students. Overall,

the scale was not found to be reliable ($\alpha = .57$). Therefore, the *pity* item was deleted to make

the scale more reliable ($\alpha = .79$). This item possibly reflects a different construct.

Group identification

Group identification was measured using the group identification scale of van Zomeren et

al. (2008). It is a 7-point scale ranging from *not at all* (1) to *very much* (7) with four items (α

$= .86$). An example item includes: "I see myself as a student". Higher scores indicate higher

group identification.

Besides these scales, participants were asked about their age and gender. Since the

participants were all Dutch, the questionnaire was in Dutch.

Results

Preliminary Analysis

The number of participants in the contradiction, assimilation control, and non-assimilation control conditions was 84, 85, and 88, respectively. For the average scores of the study variables across the conditions, see Table 1; for all intercorrelations, see Table 2. The average scores on the stereotype measures can be found in Table 3.

Table 1

Means and Standard Deviations for Study Variables Across Conditions and in Total

Variable	Condition						Overall	
	Contradiction		Assimilation control		Non-assimilation control			
	M	SD	M	SD	M	SD	M	SD
Post prejudice	48.9	27.7	55.4	26.9	46.8	22.1	50.4	25.8
Discriminatory behavioural intentions	5.08	1.56	5.11	1.65	5.22	1.40	5.14	1.53
Prior prejudice	56.2	25.6	59.3	25.1	55.5	22.7	57.0	24.5
Cognitive dissonance	3.25	0.82	3.42	0.99	3.24	0.90	3.30	0.91
Perceived unfairness	3.62	1.03	3.74	1.25	3.60	1.24	3.65	1.18
Compassion	4.23	0.88	4.27	1.02	4.26	0.99	4.25	0.96
Group identification	5.47	0.88	5.59	0.82	5.42	0.93	5.49	0.88
Age	19.8	2.05	20.2	1.88	19.8	1.93	19.9	1.95

Note. The contradiction condition reflects the prejudice paradox. Higher scores on the prejudice and discrimination measures refer to lower levels of actual prejudice and discrimination.

Table 2

Intercorrelations for Study Variables

Variable	1	2	3	4	5	6	7	8
1. Post prejudice	—							
2. Discriminatory behavioural intentions	.50 ***	—						
3. Prior prejudice	.85 ***	.45 ***	—					
4. Cognitive dissonance	.30 ***	.22 ***	.29 ***	—				
5. Perceived unfairness	.44 ***	.40 ***	.35 ***	.72 ***	—			
6. Compassion	.32 ***	.34 ***	.36 ***	.28 ***	.28 ***	—		
7. Group identification	.12	.06	.12 *	.02	-.02	.06	—	
8 Age	.10	.06	.04	.05	.11	.04	-.14 *	—

Note. Higher scores on the prejudice and discrimination measures refer to lower levels of

actual prejudice and discriminatory behavioural intentions.

$^*p < .05$, $^{**}p < .01$, $^{***}p < .001$

Manipulation Check

The condition significantly predicted scores on the strong check. This was based on a

between-subjects analysis of variance, $F(2, 254) = 7.31$, $p < .001$, $\eta_p^2 = .05$, observed power =

.94. Participants in the contradiction condition thought the statements were generally more

contradicting *(M = 3.63, SD = 1.48)*, than in the assimilation control condition *(M = 4.11, SD*

= 1.46) and non-assimilation control condition *(M = 4.45, SD = 1.31)*. Lower scores indicated

more perceived contradiction. The participants were also asked whether they thought the

statements were contradictory for each theme separately: financial motive, academic skills,

and joined classes (See Appendix D for the scores for each theme across the conditions).

Chi-square tests were performed to compare the answers on the weak check per

condition. For the themes financial motive, $X^2(6, N = 257) = 124.10$, $p < .001$, academic

skills, $X^2(6, N = 257) = 157.60$, $p < .001$, and joined classes, $X^2(6, N = 257) = 63.75$, $p < .001$,

the scores for the first trial differed significantly across the conditions. For each theme, the

expected answer was also the most prevalent in both control conditions but not in the

contradiction condition (See Appendix E for the answers for both the first and second

attempt).

Overall, the stereotypes the participants held about Chinese students also differed

significantly across conditions (See Table 3 for the scores on the different stereotype

measures across the conditions), based on a multivariate analysis of variance where the

stereotype measures were regressed on the condition and prior prejudice. Both competence,

$F(2,253) = 9.03$, $p < .001$, $\eta_p^2 = .07$, observed power $= .97$, and effort, $F(2,253) = 8.59$, $p <$

$.001$, $\eta_p^2 = .06$, observed power $= .97$, were significantly predicted by the condition. As one

might expect, Chinese students were rated most competent and scored highest on effort in the

assimilation control, least in the non-assimilation control condition, and in between for the

contradiction condition. No significant effects were found for the other stereotype measures.

Table 3

Means and Standard Deviations for the Stereotype Measures

Stereotype	Condition						Overall	
	Contradiction		Assimilation control		Non-assimilation control			
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Warmth	4.79	1.07	4.74	0.89	4.86	0.81	4.79	0.93
Competence	5.79	0.70	5.84	0.66	5.41	0.80	5.67	0.75
Morality	4.95	1.08	5.05	0.90	4.90	0.93	4.97	0.97
Aggression	2.49	0.88	2.59	0.93	2.45	0.90	2.51	0.90
Effort	6.22	076	6.30	0.73	5.81	0.93	6.11	0.84
Sociability	5.35	0.83	5.23	0.84	5.28	0.80	5.29	0.82

Note. The contradiction condition reflects the prejudice paradox.

Assumptions

The hypotheses were tested using PROCESS Macro models (Hayes, 2022). Since these models use linear regressions, the assumptions tested are linearity, normality of the residuals, and no multicollinearity. The homoscedasticity assumption was tested using Levene's test of equality of error variances for all analyses, with prior prejudice centred. All tests were non-significant, except for post prejudice being regressed on the condition and cognitive dissonance, $F(2,254) = 6.11$, $p = .003$. This violation will be corrected using heteroskedasticity-consistent error estimators. Linearity was tested using scatter plots (See Appendix F), and no non-linear relationships were found. For all predictor and outcome variables, the Shapiro Wilk tests of normality were significant, indicating that the normality of residuals assumption is violated. This violation will be resolved by using bootstrapping. No multicollinearity was tested using a correlation matrix (See Table 2). This assumption was not violated since all the independent variables that were part of the same analysis correlated less than .80.

Main Analysis

Two PROCESS Macro models (Hayes, 2022) were used to test the hypotheses. For each model, the condition functioned as the independent variable and prior prejudice as the moderator. The models were each run twice, once with post prejudice as the dependent variable and once with discriminatory behavioural intentions. Model 7 (Hayes, 2022), measuring moderated mediation, was used to test the self-focused pathway with cognitive dissonance as a mediator (See Figure1). Model 84 (Hayes, 2022), measuring moderated sequential mediation, was used to test the other-focused pathway (See Figure 2). Perceived fairness was the first mediator, and compassion was the second mediator. It should be noted that some regressions that the models ran were not specified in the hypotheses beforehand.

Prior prejudice was centred prior to the analyses in both models to avoid multicollinearity due to interaction effects. The heteroskedasticity-consistent error estimators

were set to HC4, as recommended by Hayes and Cai (2007), for the self-focused pathway

predicting post prejudice. A 5000-sample bootstrap was used to determine the 95%
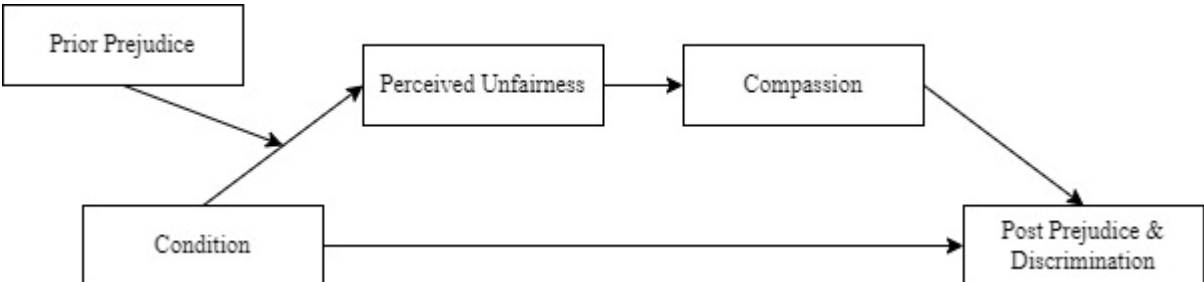
confidence intervals.

Figure 1

Self-Focused Pathway
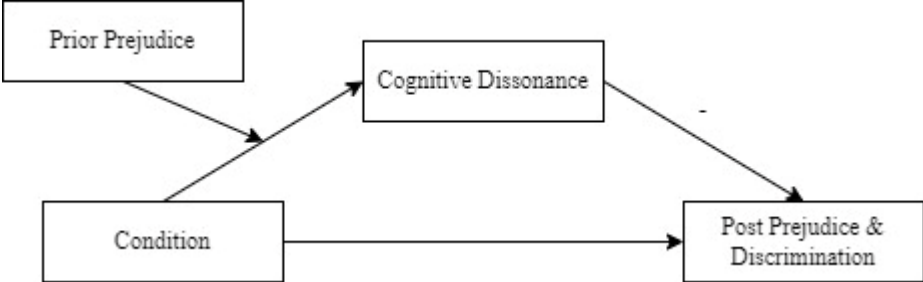
Note. This visual represents how confronting people with the prejudice paradox is expected to

lower prejudice and discriminatory behavioural intentions via the self-focused pathway. It is a

moderated mediation model.

Figure 2

Other-Focused Pathway

Note. This visual represents how confronting people with the prejudice paradox is expected to

lower prejudice and discriminatory behavioural intentions via the other-focused pathway. It is

a moderated sequential mediation model.

First, the self-focused pathway will be discussed. Cognitive dissonance was regressed

on the condition, prior prejudice, and their interaction. The overall model was significant, $R^2 =$ .09, $F(5, 251) = 4.06$, $p < .001$. However, the participants did not score significantly different on cognitive dissonance across the conditions when controlling for prior prejudice. Prior prejudice also did not significantly predict cognitive dissonance. In addition, there was no significant interaction between the condition and prior prejudice.

Next, post prejudice, $R^2 = .11$, $F(3, 253) = 10.38$, $p < .001$, and discriminatory behavioural intentions, $R^2 = .22$, $F(3, 253) = 4.33$, $p = .005$, were regressed separately on the condition, prior prejudice, and their interaction. The participants did not score significantly different on discriminatory behavioural intentions and post prejudice across the conditions when controlling for cognitive dissonance. Cognitive dissonance did significantly negatively predict post prejudice, $t(253) = 4.76$, $p < .001$, as well as discriminatory behavioural intentions, $t(253) = 3.55$, $p < .001$.

For the self-focused pathway, no support was found for moderated mediation since none of the confidence intervals for the indexes of moderated mediation included zero (Hayes, 2022). This was true for discriminatory behavioural intentions as the dependent variable and post prejudice.

Now, the other-focused pathway will be discussed. First, perceived unfairness was regressed on the condition, prior prejudice and their interaction, $R^2 = .13$, $F(5, 251) = 7.34$, $p < .001$. The participants did not score significantly different on perceived unfairness across the conditions when controlling for prior prejudice. Prior prejudice did significantly predict perceived unfairness, $t(251) = 2.72$, $p = .007$. Higher prior prejudice levels were related to less perceived unfairness. There was no significant interaction between the condition and prior prejudice in predicting unfairness.

Next, compassion was regressed on the condition, prior prejudice, their interaction, and perceived unfairness. The overall model was significant, $R^2 = .22$, $F(6, 250) = 11.58$, $p <$

.001. The participants did not score significantly different on compassion across the conditions when controlling for prior prejudice. Prior prejudice did significantly predict compassion, $b = 0.01$, $t(250) = 2.66$, $p = .008$. Higher prior prejudice levels were associated with lower levels of compassion. Perceived unfairness also significantly predicted compassion, $b = 0.12$, $t(250) = 2.04$, $p = .042$. Higher perceived unfairness was related to more compassion.

When comparing the contradiction condition with the assimilation control condition, there was a significant interaction effect of the condition and prior prejudice, $b = 0.01$, $t(250) = 2.20$, $p = .028$. People with higher prior prejudice levels experienced more compassion in the contradiction condition compared to the assimilation control condition. In comparison, people with lower prior prejudice levels seemed to experience less compassion in the contradiction condition than in the assimilating control condition. However, the differences were most evident for people with high levels of prior prejudice. For a visual representation of the interaction effect, see Figure 1 below. There was no significant interaction effect when the contradiction condition was compared to the non-assimilation control condition.

Figure 1

Interaction Effect of Prior Prejudice and the Condition on Compassion
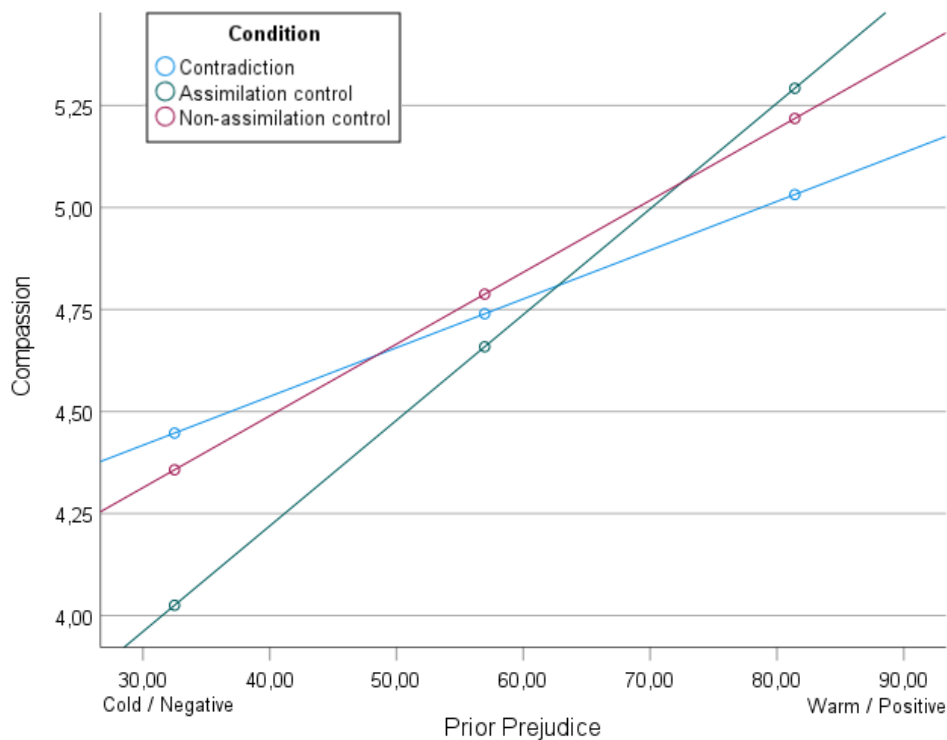
Note. The average compassion scores per condition are shown at three levels of the prior prejudice measure. The left column of dots represents prior prejudice one standard deviation below the mean, the middle column represents the mean, and the right column represents one standard deviation above the mean. Counterintuitively, higher scores on the prior prejudice measure reflect warmer or more positive feelings towards Chinese students and, therefore, lower actual prejudice.

Lastly, post prejudice, $R^2 = .55$, $F(4, 252) = 26.65$, $p < .001$, and discriminatory behavioural intentions, $R^2 = .27$, $F(4, 252) = 22.79$, $p < .001$, were regressed separately on the condition, perceived unfairness, and compassion. The participants did not score significantly different on post prejudice, as well as discriminatory behavioural intentions, across the conditions when controlling for perceived unfairness and compassion. Perceived unfairness significantly predicted post prejudice, $b = 7.75$, $t(252) = 6.44$, $p < .001$, as well as discriminatory behavioural intentions $b = 0.41$, $t(252) = 5.55$, $p < .001$. The more unfairness

one perceived, the less prejudice and discriminatory behavioural intentions one had.

Compassion also significantly predicted post prejudice $b = 6.88$, $t(252) = 5.62$, $p < .001$, as

well as discriminatory behavioural intentions $b = 0.44$, $t(252) = 5.98$, $p < .001$. More

compassion towards Chinese students was related to less post prejudice and discriminatory

behavioural intentions.

For the other-focused pathway, some support was found for moderated mediation

since two of the confidence intervals for the indexes of moderated mediation included zero

(Hayes, 2022). The indirect effect of the condition on post prejudice, as well as discriminatory

behavioural intentions, via compassion did not include zero when comparing the contradiction

condition with the assimilation control condition. No such effect was found when comparing

the contradiction condition with the non-assimilation control condition. No support was found

either for moderated mediation with perceived unfairness as the mediator. In addition, no

support was found for the moderated sequential mediation model as a whole.

A separate analysis was performed to test whether the manipulation led to significant

changes in prejudice. A repeated-measures analysis of variance was used with the variables

prior prejudice, post prejudice, and condition. The difference between prior and post prejudice

was significant, $F(1, 254) = 57.07$, $p < .001$, $\eta^2 = .02$. Meaning that post prejudice scores were

significantly higher than prior prejudice scores. There was no significant interaction effect

between prejudice and condition. Using Post Hoc Tests with Tukey correction for multiple

testing, prejudice was found to be only increased significantly in the contradicting condition,

$M_{difference} = 7.23$, $t(254) = 4.74$, $p < .001$, and the non-assimilation condition, $M_{difference} = 8.69$,

$t(254) = 5.83$, $p < .001$.

Controlling for the control variables, age, gender, and student identification did not

change the results for either the self-focused pathway, the other-focused pathway or the

repeated-measures analysis of variance.

Discussion

The main aim of this study was to investigate what happens when people are confronted with the prejudice paradox (van der Linden & Spears, 2016). We expected this to lower prejudice (*Hypothesis 1*) but instead found that presenting the participants with contradicting prejudiced statements about Chinese students increased prejudice. Prejudice also significantly increased when the participants were shown non-contradicting prejudiced statements reflecting non-assimilation to Western meritocratic values. No significant differences in prejudice were found when the statements only reflected assimilation to these values. For all hypotheses, the effects found for post prejudice corresponded to those for discriminatory behavioural intentions.

Prejudice was expected to be lowered via two routes: a more self- and a more other-focused route. Via the more self-focused route, being presented with the prejudice paradox was expected to lower prejudice by generating the experience of cognitive dissonance (*Hypothesis 2*). Although experiencing more cognitive dissonance was related to less prejudice, the conflicting prejudiced statements did not lead to more cognitive dissonance than the non-conflicting statements. Prior prejudice also did not moderate the relationship between the condition and cognitive dissonance. Therefore, no support was found for the self-focused pathway as a whole.

Via the more other-focused route, the intervention was expected to lower prejudice by increasing compassion for the targets of prejudice (*Hypothesis 3)*. Although experiencing more compassion was related to less prejudice, the levels of compassion did not differ across the conditions. More specifically, compassion was expected to increase due to perceiving the contradicting prejudiced statements as unfair (*Hypothesis 4*). Although more perceived unfairness was related to more compassion and less prejudice, the amount of perceived unfairness did not differ depending on being presented with contradicting or non-

contradicting beliefs. Prior prejudice also did not moderate the relationship between the condition and perceived unfairness. Therefore, no support was found for the other-focused pathway as a whole.

Lastly, we expected people with higher prior prejudice levels to be less likely to experience cognitive dissonance or perceive the beliefs as unfair (*Hypothesis 5)*. However, a direct relationship between prior prejudice was only found for perceived unfairness. In addition, compassion was also found to be directly related to prior prejudice. Moreover, an interaction effect was found between the condition and prior prejudice in predicting compassion. Although these last two effects were not predicted in our hypotheses, the analyses were necessary to study the other-focused pathway as a whole. The other-focused pathway does seem to be supported when excluding perceived unfairness.

Self-Focused Pathway

First, the findings concerning the self-focused pathway will be discussed. It was hypothesised that participants in the contradiction condition would experience cognitive dissonance by realising that they also hold contradicting beliefs. However, the cognitive dissonance scores did not differ significantly from the control conditions. Cognitive dissonance could thus either have also arisen in the control conditions or barely in general. Since the scores on the cognitive dissonance scale are to be interpreted relatively instead of in absolute terms, determining which scenario has unfolded is challenging.

An explanation for the presence of cognitive dissonance in the control conditions could be found in disagreement with the prejudiced statements. In other words, the participants could have been confronted with beliefs that were not consistent with their own. The uncomfortable feeling that arises because of internal inconsistency (Festinger & Aronson, 1997) could possibly also arise due to an inconsistency between one's own beliefs and that of others. Especially considering that the beliefs were presented as coming from the ingroup, it

could have made them feel especially uncomfortable. On the other hand, a lack of cognitive

dissonance could result from not noticing any discrepancies between the statements.

However, this scenario seems unlikely since the statements in the contradiction condition

were rated significantly more contradicting than in the other two conditions. Therefore, we

believe that cognitive dissonance was present in all conditions.

The lack of significant results of prior prejudice and cognitive dissonance could be

due to possibly opposing processes being at play. It was hypothesised that people high in

prejudice would be motivated not to see the prejudiced statements as contradicting to avoid

the uncomfortable feeling that accompanies cognitive dissonance (Festinger & Aronson,

1997). However, a certain amount of prior prejudice also makes it more likely that

participants recognise that they hold contradicting prejudiced beliefs as well. Prior prejudice

could thus both have inhibited as well as stimulated experiencing cognitive dissonance,

thereby cancelling each other out.

Although cognitive dissonance did not arise as predicted, it lowered prejudice and

discriminatory behavioural intentions, as expected. This finding is in accordance with

cognitive dissonance theory (Festinger & Aronson, 1997), predicting that dissonance would

lead to a change in attitudes, beliefs, or behaviour. In this case, both attitudes and behavioural

intentions have changed.

Other-Focused Pathway

Perceived Unfairness

Just as there were no differences in cognitive dissonance across the conditions, there

were also no significant differences in perceived unfairness. In other words, the prejudiced

statements were considered equally unfair in all conditions. Earlier it was hypothesised that

the contradicting beliefs would be perceived as especially unfair since both beliefs cannot be

true. An explanation for perceptions of unfairness in the non-contradictory conditions could

be that the participants simply disagreed with them. In line with this reasoning, prior prejudice was found to significantly predict perceived unfairness. People who were less prejudiced and who would thus be less likely to agree with prejudiced statements indeed perceived the statements as more unfair. Perceived unfairness could thus either be a result of acknowledging a contradiction in prejudiced beliefs or of not agreeing with the prejudiced statements.

Compassion

Besides predicting perceived unfairness, prior prejudice also significantly negatively predicted compassion. This finding is in line with earlier research showing a relationship between compassion and prejudice (Berger et al., 2018; Hunsinger et al., 2014; Sinclair et al., 2016). However, for these studies, the causal sequence of the relationship was reversed since compassion negatively predicted prejudice. The current study also found compassion and post prejudice to be related. The relationship between prejudice and compassion thus seems to be reciprocal; compassion seems to both be a result of low prejudice as well as lead to lower prejudice levels.

In addition, an interaction effect was found between prior prejudice and the condition in predicting compassion (See Figure 1 for a visualisation of the effect). People with higher prior prejudice levels were more likely to feel compassion when viewing contradicting prejudiced beliefs as opposed to non-contradicting beliefs reflecting assimilation. This pattern seemed reversed for people with lower prior prejudice levels, although the differences were less substantial. Importantly, this interaction effect was not found when comparing the contradicting beliefs with the non-contradicting beliefs reflecting non-assimilation.

Since prejudice is expected to stem from perceptions of threat, according to intergroup threat theory (Stephan et al., 2005), people low in prejudice would thus be expected to feel less threatened by immigrants. Therefore, our results indicate that when people are prejudiced towards an immigrant group, competition and similarity threat (reflecting assimilation) lead to

less compassion than burden and dissimilarity threat (reflecting non-assimilation). While for less prejudiced people, burden and dissimilarity seemed to lead to slightly less compassion. However, for people low in prejudice, which type of realistic or symbolic threat made salient did not influence compassion levels as much as for those high in prejudice. Unfortunately, due to the study's design, it is unknown whether realistic or cultural threat influenced feelings of compassion more.

The minimal differences in compassion for participants low in prejudice fit intergroup threat theory (Stephan et al., 2005). Following this theory, a lack of prejudice should mean a lack of experienced threat. Therefore, priming different types of threat should not impact those low in prejudice. In addition, previous research has found that people feel less empathy and compassion for threatening outgroups (as summarised by Chang et al., 2016). The finding that people low in prejudice feel more compassion than people high in prejudice thus fits with earlier research and theories.

Although the findings for people low in prejudice are in accordance with the literature (Stephan et al., 2005), the findings for people high in prejudice are not. Namely, Testé et al. (2012) found burden threat to weigh heavier than competition threat. However, in our study, competition threat seems to weigh heavier for people high in prejudice since priming competition evoked less compassion than priming burden threat. This reversed finding could be due to our sample existing of students. Students might be more influenced by competition threat (reflecting assimilation) than burden threat (reflecting non-assimilation) since they do not contribute much to society in terms of taxes while they are already in competition for grades and study opportunities.

Besides intergroup threat theory (Stephan et al., 2005), another possible explanation for the interaction effect could be that more prejudiced people might not deem compassion for Chinese students as necessary since they are successful in terms of the meritocratic ideal. On

the other hand, less prejudiced people might feel compassion for Chinese students because they embody the meritocratic ideal. Even though the immigrant group shows the same behaviour, they are judged differently by different people in society. This theorising is in line with the prejudice paradox (van der Linden & Spears, 2016), stating that immigrants are damned whether they do or do not assimilate to Western meritocratic values.

Overall Differences in Prejudice

When examining the interaction effect, at first sight, these results might seem to contradict earlier studies finding assimilation to be the preferred strategy by the host society (Testé et al., 2012; Turper, 2017; van der Linden & Spears, 2016). However, the assimilation control condition was the only condition in which prejudice did not significantly increase. It should be noted that the differences between the conditions were not significant. In research using different subsets of the population, the preference for assimilation might be higher due to an increase in burden threat. However, it remains striking that compassion was lowest in this condition for people high in prejudice.

The reason prejudice increased in all conditions might be due to both informational and group influences. Concerning informational influences, prejudice might have increased by having provided the participants with accumulating reasons for prejudice. Concerning group influences, since the prejudiced statements were presented as coming from the ingroup, it could have signalled the ingroup norm of being prejudiced towards Chinese students. Ingroup norms are known to stimulate conformity (Spears, 2021), thereby increasing prejudice. The prejudiced ingroup norm could also have made participants feel safer to express their prejudiced beliefs should this have already reflected their beliefs. In addition, the participants might have trusted their ingroup to have valid reasons for their prejudice, a type of influence that is closely related to both group and informational influences (Spears, 2021). Prejudice could thus have increased via different processes.

Limitations and Future Directions

A limitation of the study could be that most people in the contradiction condition did not give the correct answer on the weak manipulation check. However, this could be due to participants simply no thinking that the answer option "both applicable" would be correct since that would be contradicting. In addition, the scores on the strong check indicate that the manipulation did work since the participants did perceive the contradiction condition as the most contradicting one. Moreover, the scores on the stereotype's effort and competence varied according to the manipulation.

Another limitation of the study is that it did not measure actual behaviour. Although all three conditions have significantly lowered prejudice and discriminatory behavioural intentions, this does not necessarily translate to behaviour. Namely, previous research has often found a gap between intention and behaviour (Sheeran & Webb, 2016). In addition, the discriminatory behavioural intentions measure only consisted of one item and therefore did not give insight into a range of discriminatory behaviours. Future research is necessary to determine the consequences of the changes in attitudes and behavioural intentions and the length of these effects.

The study was also slightly underpowered, and the study sample was not representative of the population since the study only included first-year psychology students that were predominately female. However, as the prejudice paradox states, different groups in society can feel differently towards the same immigrant group (van der Linden & Spears, 2016); therefore, it is important to study various groups in society. Both issues could have distorted the findings.

Since this was merely the first study about how people react when presented with the prejudice paradox, more research is necessary. Future research could use a more naturalistic setting, use different subsets of the population, or present the statements as coming from an

outgroup. In addition, qualitative research could enrich our understanding of what goes on in people's minds when confronted with contradicting prejudiced beliefs. More specifically, the research also raised questions about the origin of cognitive dissonance.

Conclusion

This study showed that being confronted with the prejudice paradox (van der Linden & Spears, 2016) does not lead to significantly different levels of prejudice and discriminatory behaviour than being confronted with non-contradicting prejudiced beliefs. Contrary to our expectations, all conditions resulted in equal levels of cognitive dissonance, perceived unfairness, and compassion. These variables all significantly negatively predicted prejudice and discriminatory behavioural intentions, thereby strengthening the literature on concepts that could be used to battle prejudice and discrimination. In addition, the study showed that prior prejudice and compassion could help explain why attitudes towards the same immigrant group differ among people. Therefore, this information adds to the understanding of the Prejudice Paradox (van der Linden & Spears, 2016). However, in the current form, presenting people with the prejudice paradox does not seem to be an effective intervention since it increased as opposed to decreased prejudice. Instead, ingroup influences seemed to be more persuading in swaying prejudiced attitudes than the unfair treatment of an outgroup.

References

Artikel 1. (2021). *Discriminatiecijfers in 2021.*

https://www.art1.nl/publicaties/discriminatiecijfers-in-2021/

Berger, R., Brenick, A., & Tarrasch, R. (2018). Reducing Israeli-Jewish pupils' outgroup

prejudice with a mindfulness and compassion-based social-emotional program.

Mindfulness, 9(6), 1768–1779. https://doi.org/10.1007/s12671-018-0919-y

Burhan, O. K., & Leeuwen, E. (2016). Altering perceived cultural and economic threats can

increase immigrant helping. *Journal of Social Issues, 72*(3), 548–565.

https://doi.org/10.1111/josi.12181

Chang, L. W., Krosch, A. R., & Cikara, M. (2016). Effects of intergroup threat on mind,

brain, and behavior. *Current Opinion in Psychology, 11*, 69–73.

http://dx.doi.org.proxy-ub.rug.nl/10.1016/j.copsyc.2016.06.004

Chang-Hee, K., & Yong-Beom, C. (2017). How meritocracy is defined today?: Contemporary

aspects of meritocracy. *Economics & Sociology, 10*(1).

https://doi.org/10.14254/2071-789X.2017/10-1/8

Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components.

Journal of Personality and Social Psychology, 56(1), 5–18.

http://dx.doi.org.proxy-ub.rug.nl/10.1037/0022-3514.56.1.5

Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi,

F. (2019). Understanding conspiracy theories. *Political Psychology, 40*(Suppl 1), 3–

35. https://doi.org/10.1111/pops.12568

Esses, V. M. (2021). Prejudice and discrimination toward immigrants. *Annual Review of*

Psychology, 72, 503–531. https://doi.org/10.1146/annurev-psych-080520-102803

Festinger, L., & Aronson, E. (1997). A theory of cognitive dissonance. The American

journal of psychology, 110(1), 127.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype

content: Competence and warmth respectively follow from perceived status and

competition. *Journal of Personality and Social Psychology, 82*(6), 878–902.

https://doi-org.proxy-ub.rug.nl/10.1037/0022-3514.82.6.878

Hainmueller, J., & Hiscox, M. J. (2010). Attitudes toward highly skilled and low-skilled

immigration: evidence from a survey experiment. *The American Political Science

Review, 104*(1), 61–84. http://www.jstor.org.proxy-ub.rug.nl/stable/27798540

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process

analysis: A regression-based approach*. Guilford Publications.

Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators

in OLS regression: An introduction and software implementation. *Behavior Research

Methods, 39*(4), 709–722. https://doi.org/10.3758/BF03192961

Hunsinger, M., Livingston, R., & Isbell, L. (2014). Spirituality and intergroup harmony:

Meditation and racial prejudice. *Mindfulness, 5*(2), 139–144.

https://doi.org/10.1007/s12671-012-0159-5

Kite, M. E., & Whitley Jr., B. E. (2016). Psychology of prejudice and discrimination (3d ed.).

Routledge/Taylor & Francis Group.

Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group virtue: The importance of morality

(vs competence and sociability) in the positive evaluation of in-groups. *Journal of

Personality and Social Psychology, 93*(2), 234–249.

https://doi.org/10.1037/0022-3514.93.2.234

Meerholz, E. W. (2017). The 'other' side of compassion: How the self avoids responsibility

for past wrongs. [Unpusblised doctoral dissertation]. University of Groningen

Metzger, M. J., Hartsell, E. H., & Flanagin, A. J. (2020). Cognitive dissonance or credibility?

A comparison of two theoretical explanations for selective exposure to partisan news.

Communication Research, 47(1), 3–28.

http://dx.doi.org.proxy-ub.rug.nl/10.1177/0093650215613136

Rios, K., Sosa, N., & Osborn, H. (2018). An experimental approach to Intergroup Threat

Theory: Manipulations, moderators, and consequences of realistic vs symbolic threat.

European Review of Social Psychology, 29(1), 212–255.

https://doi.org/10.1080/10463283.2018.1537049

Sheeran, P., & Webb, T. L. (2016). The intention–behavior gap. *Social and Personality*

Psychology Compass, 10(9), 503–518.

http://dx.doi.org.proxy-ub.rug.nl/10.1111/spc3.12265

Sherif, M. (1956). Experiments in Group Conflict. *Scientific American, 195*(5), 54–59.

http://www.jstor.org/stable/24941808

Sinclair, L., Fehr, B., Wang, W., & Regehr, E. (2016). The relation between compassionate

love and prejudice: The mediating role of inclusion of out-group members in the self.

Social Psychological and Personality Science, 7(2), 176–183.

https://doi.org/10.1177/1948550615609736

Spears, R. (2021). Social influence and group identity. *Annual Review of Psychology, 72*,

367–390. https://doi-org.proxy-ub.rug.nl/10.1146/annurev-psych-070620-111818

Spears, R., & Tausch, N. (2015). Prejudice and intergroup relations. In Hewstone, M., &

Stroebe, W. (Eds.), *An introduction to social psychology* (6th ed., pp. 439 - 487).

Wiley.

Stephan, W. G., Lausanne Renfro, C., Esses, V. M., White Stephan, C., & Martin, T. (2005).

The effects of feeling threatened on attitudes toward immigrants. *International*

Journal of Intercultural Relations, 29(1), 1–19.

https://doi.org/10.1016/j.ijintrel.2005.04.011

Swidler, A., & Hojjat, M. (2003). Talk of Love: How Culture Matters. *Contemporary*

psychology, 48(1), 53.

Testé, B., Maisonneuve, C., Assilaméhou, Y., & Perrin, S. (2012). What is an "appropriate"

migrant? Impact of the adoption of meritocratic worldviews by potential newcomers

on their perceived ability to integrate into a Western society. *European Journal of*

Social Psychology, 42(2), 263–268. https://doi.org/10.1002/ejsp.1844

Thompson, T. L., Kiang, L., & Witkow, M. R. (2016). 'You're Asian; You're supposed to be

smart': Adolescents' experiences with the Model Minority Stereotype and longitudinal

links with identity. *Asian American Journal of Psychology, 7*(2), 108–119.

https://doi.org/10.1037/aap0000038

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective:

Cognition and social context. *Personality and Social Psychology Bulletin, 20*(5), 454–

463. https://doi-org.proxy-ub.rug.nl/10.1177/0146167294205002

Turper, S. (2017). Fearing what? Vignette experiments on anti-immigrant sentiments.

Journal Of Ethnic And Migration Studies, 43(11), 1792–1812.

https://doi.org/10.1080/1369183X.2016.1263554

van der Linden, M., & Spears, R. (2016). *The 'damned if you do, damned if you don't'*

prejudice paradox: Immigrants' cultural ideology and natives' intragroup status

position interact to predict intergroup threat. [Unpublished master's thesis].

University of Groningen

van Zomeren, M., Leach, C. W., & Spears, R. (2010). Does group efficacy increase group

identification? Resolving their paradoxical relationship. *Journal of Experimental*

Social Psychology, 46(6), 1055–1060.

http://dx.doi.org.proxy-ub.rug.nl/10.1016/j.jesp.2010.05.006

Zebel, S., Doosje, B., & Spears, R. (2009). How perspective-taking helps and hinders group-

based guilt as a function of group identification. Group Processes & Intergroup

Relations, 12(1), 61–78. https://doi-org.proxy-ub.rug.nl/10.1177/1368430208098777

Appendix A

Cover Story

Background Information

In 2015 the University of Groningen (UG) announced that they wanted to collaborate with a Chinese agricultural university from Yantai (CLU). The idea was to have a campus of the UG in mainland China. The UG would decide on the curriculum, the courses would be given by international lecturers, and the CLU would be responsible for the buildings and facilities. These buildings and facilities already existed and were ready to be used for this purpose.

The campus would be used both by Chinese students as well as students from the UG. Chinese students could go to the university to have an international education, and students from the UG could go there for an exchange. According to Dutch law, all students would need to study at least one year in Groningen. These students would need to pay the UG the full tuition rate.

As you might have noticed, this plan has not followed through. In 2017 the University of Groningen decided to stop the collaboration because of a lack of support among students and staff.

Current Plans

Recently, the UG has received another offer from a Chinese university to collaborate. Although the last project did not come off the ground, the UG does wants to explore the option. The exact details of the collaboration are still unknown but will most likely resemble the plans from 2015. The university first wants to know whether there is support, before spending money and resources. This time they are investigating more extensively whether all parties are on board. To get an indication of the support and critique amongst students, the UG has conducted several focus groups. We have selected the most representative statements

of the students from the UG in these interviews and sorted them by theme. First, the most common arguments in favour of the project are listed, followed by the most common arguments against the project.

Appendix A

Manipulated Statements for each Condition

Table A

Statements per Condition

Opinion towards collaborating	Theme	Condition		
		Contradiction	Assimilation control	Non-assimilation control
In favour		I think it's a good idea because then a lot of students get the opportunity to do an exchange abroad. Now for most studies, only a few students get this chance.		
		I think it could provide many opportunities for students. Since China is one of the most important players in the world economy, it could bring job opportunities for students later.		
Against	Financial motives	All the money coming in via Chinese students [who have to pay the international fee for college money to the UG] could be good for the university. I only worry that it will come at a political cost, though.		The university already does not have enough money for research and proper education. This collaboration would only deplete the resources even more.
		It sounds like it's going to cost the university a lot of money. I believe it would be better to spend that money elsewhere.	I can see the project bringing in a lot of money, but the university is not a business, so that should not be the aim.	
	Academic skills	The work mentality of that of Chinese students might be too extreme. It would not be fair towards Dutch students to have Chinese classmates that study 24/7; there is no way for students with a social life to keep up with that.		The Netherlands has a very high education standard, but I worry that will not always be the case for China. It would be a shame if this would slow down the tempo in classes.

Opinion towards collaborating	Theme	Condition		
		I think the level of English of Chinese students is not always very high, which could be a problem. Especially during discussions or group work, it could be at the cost of Dutch students' education.	It might be hard for Dutch students to compete with Chinese students for grades, seeing that Chinese students generally are so focused on getting the highest grade possible for their exams.	
	Joined classes	To be honest, I don't really see the benefit of having joint classes. I mean, I don't think it would be very different to have them [Chinese students] in the classroom. They're also good, hard-working students, just like us.		To be honest, I don't think having shared classes is a good idea. Since China is a communist country, they have different values from here. Especially academic freedom is not highly valued. This could pose problems during classes.
		The educational system in China is very different from here. They are generally not very assertive or used to having discussions, so I don't think that will work very well.	I also don't see what difference it would make [to have joined classes]. For them, it could be a way to learn how to become better than us, but I don't see how that should benefit Dutch students.	

Note. Two statements were given for each theme. For the control conditions, when the box is

blank, the sentence on the same row from the contradiction condition was used.

Appendix C

Questions Weak Manipulation Check

Table C

The Questions and Answer Options for the Weak Manipulation Check

Question	Answer options
Does a collaboration between the University of Groningen and a Chinese university increase job prospects for students or is a good opportunity to learn an extra language?	Increases job prospects Opportunity to learn an extra language Neither applicable Both applicable
Do Chinese students cost or contribute more money to the University of Groningen?	Cost more Contribute more Neither applicable Both applicable
Are the academic skills of Chinese students too high or too low compared to Dutch students?	Too high Too low Neither applicable Both applicable
Do Dutch students don't want to follow joined classes with Chinese students because it won't make a difference or because they are too different?	Not different enough Too different Neither applicable Both applicable

Appendix D

Answers Strong Manipulation Check

Table D

Scores on the Strong Manipulation Check Across the Conditions

Perceived contradiction concerning…	Condition					
	Contradiction		Assimilation control		Non-assimilation control	
	M	*SD*	*M*	*SD*	*M*	*SD*
Financial motives	3.54	1.88	3.99	1.500	5.10	1.44
Academic skills	3.79	1.80	4.74	1.80	4.43	1.72
Joined classes	3.65	1.76	4.24	1.66	4.19	1.69
In general	3.63	1.48	4.11	1.46	4.45	1.31

Note. The contradiction condition reflects the prejudice paradox. Higher scores indicate less

perceived contradiction.

Appendix E

Answers Weak Manipulation Check

Table E1

Answers Weak Manipulation Check for Financial Motives

Answer Options	Attempt	Condition		
		Contradiction	Assimilation control	Non-assimilation control
		n	*n*	*n*
Cost more	First	21	7	57$_a$
	Second	27	3	29$_a$
Contribute more	First	31	70$_a$	10
	Second	23	46$_a$	4
Both not applicable	First	11	4	17
	Second	0	4	9
Both applicable	First	21$_a$	4	4
	Second	32$_a$	1	2
Overall	First	84	85	88
	Second	21	7	57

Note. Subscripts refer to the correct answer per condition.

Table E2

Answers Weak Manipulation Check for Academic Skills

Answer Options	Attempt	Condition		
		Contradiction	Assimilation control	Non-assimilation control
		n	*n*	*n*
Too high	First	55	71$_a$	4
	Second	39	50$_a$	4
Too low	First	9	4	67$_a$
	Second	8	3	36$_a$

Answer Options	Attempt	Condition		
Both not applicable	First	11	9	15
	Second	7	1	4
Both applicable	First	9_a	1	2
	Second	28_a	0	0
Overall	First	84	85	88
	Second	82	54	44

Note. Subscripts refer to the correct answer per condition.

Table E3

Answers Weak Manipulation Check for Joined Classes

Answer Options	Attempt	Condition		
		Contradiction	Assimilation control	Non-assimilation control
		n	*n*	*n*
Too similar	First	13	33_a	1
	Second	11	24_a	0
Too different	First	47	27	73_a
	Second	38	14	34_a
Both not applicable	First	12	15	13
	Second	8	13	9
Both applicable	First	12_a	10	1
	Second	25_a	3	1
Overall	First	84	85	88
	Second	82	54	44

Note. Subscripts refer to the correct answer per condition.

Appendix F

Scatter Plots for Testing Linearity

Figure F1

Association Between Cognitive Dissonance and Post Prejudice
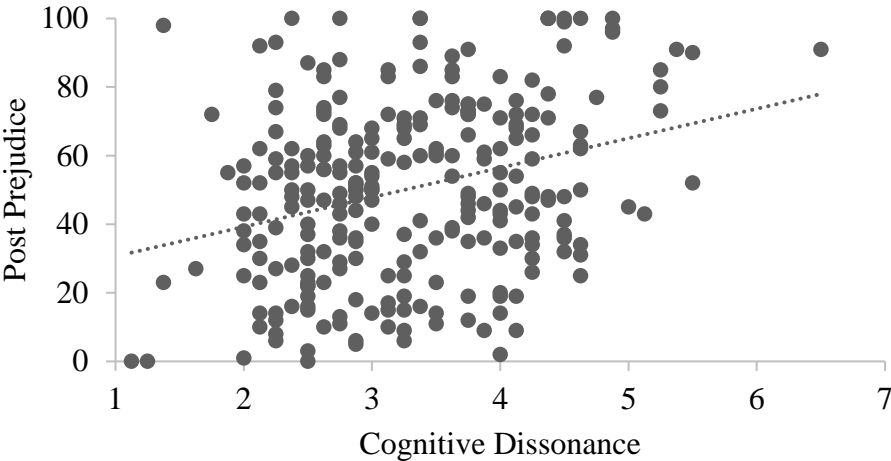
Note. Higher scores on the post prejudice measure refer to lower levels of actual prejudice.
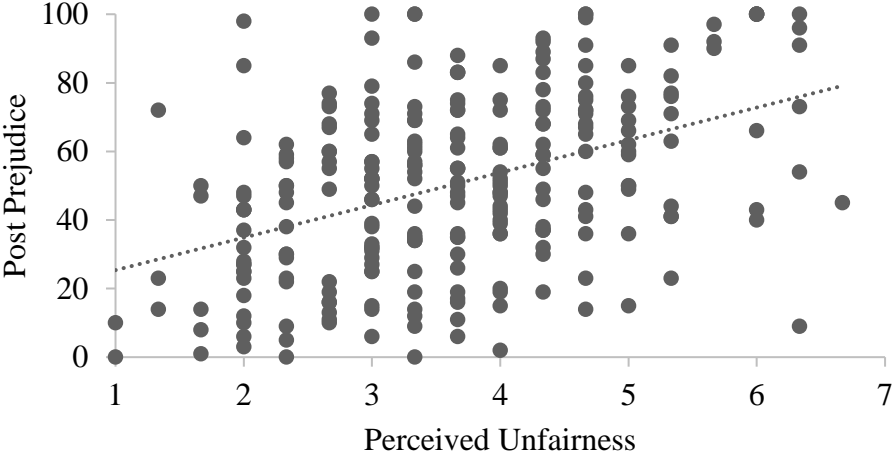
Figure F2

Association Between Prior Prejudice and Post Prejudice
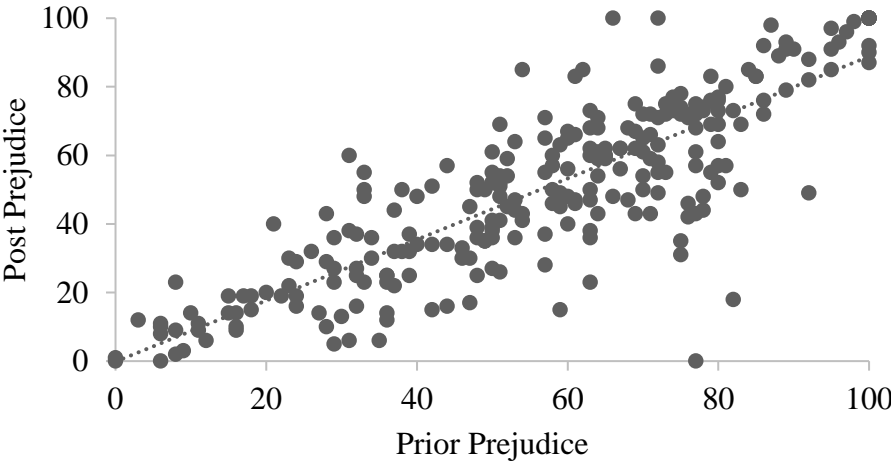
Note. Higher scores on the prejudice measure refer to lower levels of actual prejudice.
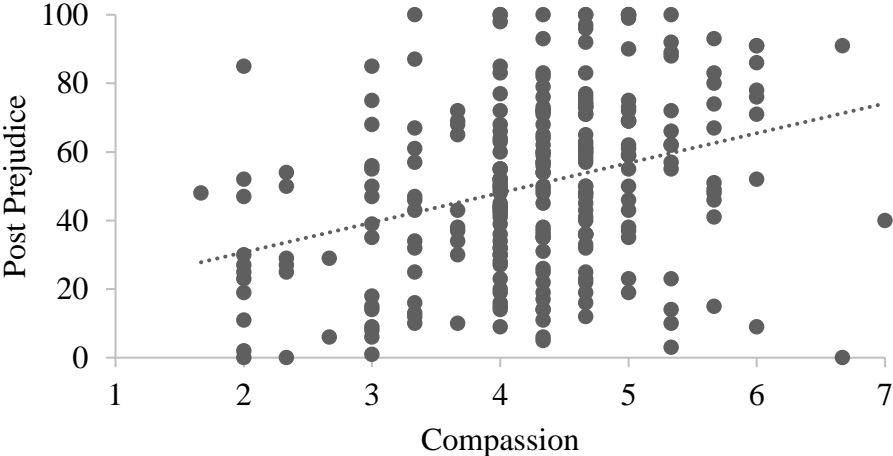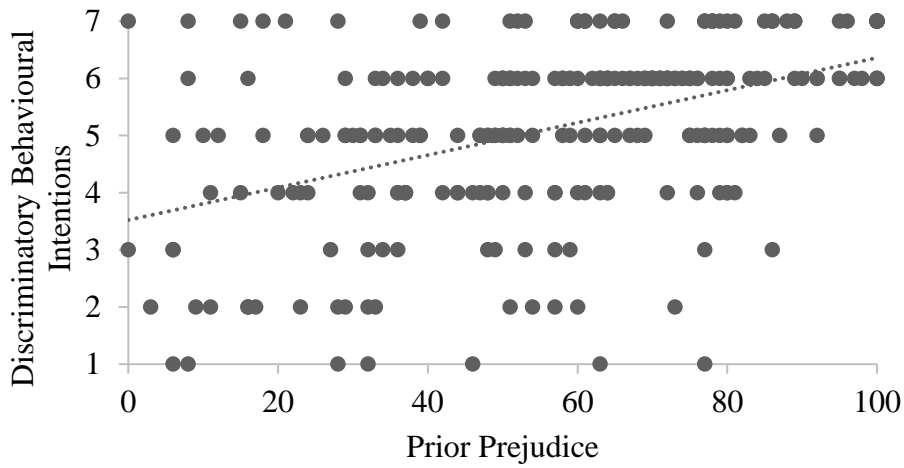
Figure F3

Association Between Perceived Unfairness and Post Prejudice

Note. Higher scores on the post prejudice measure refer to lower levels of actual prejudice.

Figure F4

Association Between Compassion and Post Prejudice

Note. Higher scores on the post prejudice measure refer to lower levels of actual prejudice.
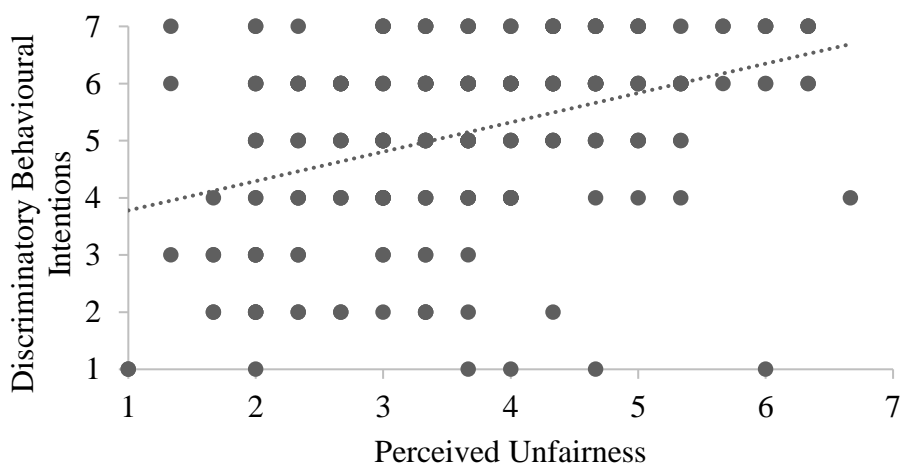
Figure F5

Association Between Prior Prejudice and Discriminatory Behavioural Intentions

Note. Higher scores on the prejudice and discrimination measures refer to lower levels of

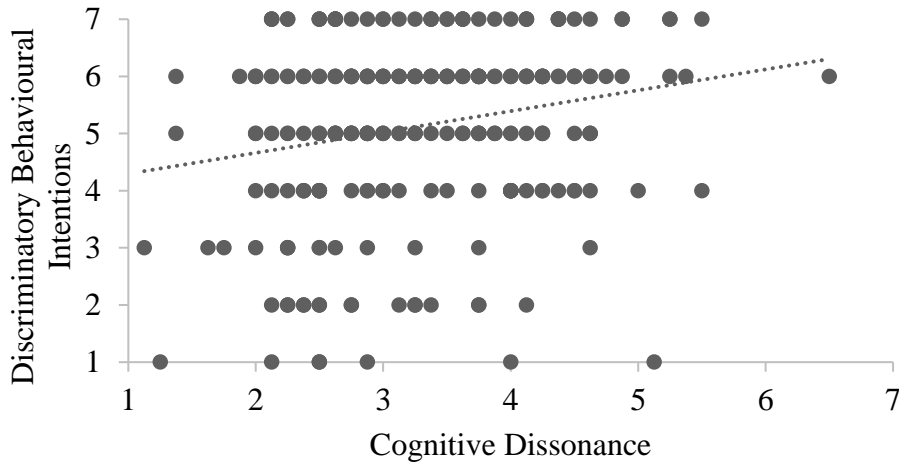actual prejudice and discriminatory behavioural intentions.

Figure F6

Association Between Perceived Unfairness and Discriminatory Behavioural Intentions

Note. Higher scores on the discrimination measures refer to lower levels of actual

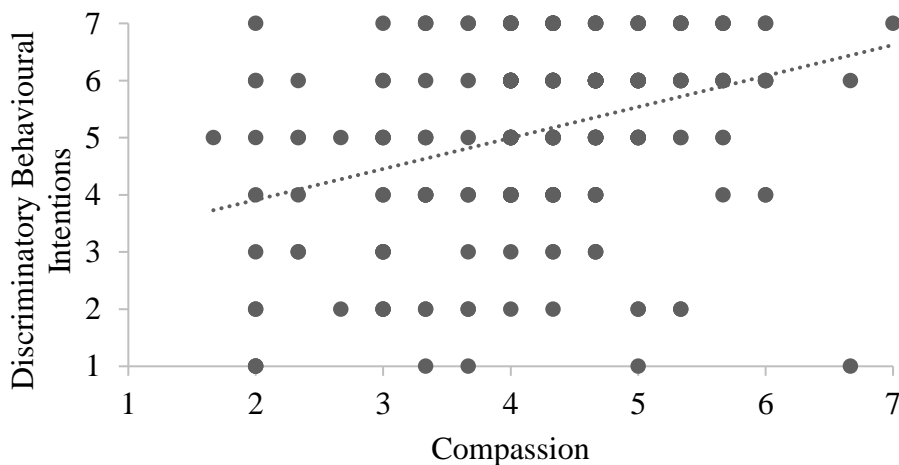discriminatory behavioural intentions.

Figure F7

Association Between Cognitive Dissonance and Discriminatory Behavioural Intentions

Note. Higher scores on the discrimination measures refer to lower levels of actual

discriminatory behavioural intentions.

Figure F8

Association Between Compassion and Discriminatory Behavioural Intentions

Note. Higher scores on the discrimination measures refer to lower levels of actual

discriminatory behavioural intentions.