

Interracial Public-Police Contact:

Relationships with Police Officers' Racial and Work-Related Attitudes and Behavior

Kristof Dhont*, Ilse Cornelis, & Alain Van Hiel

Ghent University, Department of Developmental, Personality and Social Psychology

*Corresponding author. Ghent University, Department of Developmental, Personality and Social Psychology, Henri Dunantlaan 2, B-9000, Ghent, Belgium. Tel.: ++32 (0)9 264 64 24, Fax.: ++32 (0)9 264 64 99.

E-mail addresses: Kristof.Dhont@UGent.be, Ilse.Cornelis@UGent.be,
Alain.VanHiel@UGent.be

Acknowledgments: This research was supported by a PhD research grant from the Ghent University Research Council (BOF) awarded to Kristof Dhont (#01D23607).

Special thanks are due to Bart Duriez, Johnny Fontaine, Ivan Mervielde, and Sven Pattyn for their helpful comments on an earlier version of this paper and to Koen Schelfaut for his efforts in data collection.

Abstract

In a sample of Flemish police officers ($N = 172$), we examined whether interracial public-police contact is associated with police officers' racial and work-related attitudes and self-reported behavior. Complementing previous studies, it was revealed that interracial contact (both positive and negative) is related to prejudiced behavior toward immigrants via the mediating role of racial attitudes. Moreover, intergroup contact was also shown to be related to police officers' organizational citizenship behavior toward colleagues and superiors via their perceptions of organizational fairness. In the discussion section we elaborate on the severe impact of negative contact as well as the applied consequences of our findings within police organizations.

KEY WORDS: intergroup contact; prejudice; police; procedural fairness; OCB; racism;

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1. Introduction

Ethnic minorities are likely to hold negative attitudes toward the police, often perceiving police officers as being unfair and prejudiced (Hurst, Frank, & Browning, 2000; Tyler & Huo, 2002; Weitzer & Tuch, 2005). Examination of police officers' attitudes and behavior has shown that these negative perceptions are not completely unwarranted. Indeed, studies across different Western countries have indicated that police officers effectively obtain relatively high racial prejudice scores compared to the general population (Colman & Gorman, 1982; Pitkänen & Kouki, 2002; Wortley & Homel, 1995), which might result in an increased likelihood of ethnic minority members being accosted by police officers on the streets (e.g., Home Office, 2004).

Evidently, police officers often interact with members of ethnic minorities during the exercise of their duty, and several authors have shown that minority members' negative attitudes toward the police arise from negative personal experiences (Hurst et al., 2000; Tyler & Huo, 2002; Weitzer & Tuch, 2005). An underinvestigated issue, however, is the possibility that police officers' attitudes and behavior are related to those daily intergroup experiences as well, which can, as we discuss below, be reasonably expected based on the existing contact literature and Allport (1954). Therefore, the present study examines the associations between the frequency of positive and negative contact and police officers' levels of prejudiced attitudes and (self-reported) behavior toward immigrants (i.e., ethnic minorities with non-European roots). Furthermore, because interracial public-police contact constitutes such a vital

part of police work, the present study extends the traditional intergroup contact approach of studying prejudice-related variables by also addressing the relationships with global work-related attitudes and behavior. These two focal issues are addressed in the following sections.

1.1. Intergroup contact hypothesis

The intergroup contact hypothesis formulated by Allport (1954) proposed that under optimal conditions contact between members of different groups reduces intergroup prejudice. Allport listed four essential features for successful intergroup contact to occur: (1) equal status between the groups, (2) intergroup cooperation, (3) common goals, and (4) support of authorities, norms, or customs. Later on, two factors were added to the list: opportunity for personal acquaintance and the development of intergroup friendships (Pettigrew, 1998; Pettigrew, 2008). A recent meta-analysis of more than 500 studies (Pettigrew & Tropp, 2006) provided clear evidence for the association between intergroup contact and positive outgroup attitudes. Of course, part of this association can be explained by the tendency of prejudiced people to avoid intergroup contact, but several studies adopting non-recursive structural equation models (e.g., Pettigrew, Christ, Wagner, & Stellmacher, 2007) or longitudinal designs (e.g., Brown, Eller, Leeds, & Stace, 2007) have demonstrated that contact has a stronger impact on prejudice than the reverse (Pettigrew, 2008). Hence, the available empirical evidence has led to the consensus that “intergroup contact typically reduces prejudice” (Pettigrew & Tropp, 2006, p. 751).

However, the majority of studies has typically focused on positive contact and the necessity of Allport’s ‘ideal’ conditions, triggering recent criticism that “everyday contact between groups bears little resemblance to this ideal world” (Dixon, Durrheim,

& Tredoux, 2005, p. 699). Dixon et al. (2005) argued that this focus not only resulted in theories that are sometimes unusable or even meaningless in practice, but also “has produced a picture of intergroup processes that increasingly obscures and prettifies the starker realities of everyday interactions between members of different groups” (p. 700). While this criticism does not devalue the importance of contact as a mechanism to reduce prejudice, it emphasizes the need to investigate intergroup contact in its societal context (see also Pettigrew, 2008). Moreover, because of the traditional focus on positive intergroup contact, little is known about intergroup encounters that lead to an increase of prejudice and conflict (Pettigrew, 2008).

Interracial public-police contact constitutes a good example of everyday intergroup encounters devoid of most (if not all) optimal contact conditions. Status inequality, for example, is intrinsic to police work. Nevertheless, based on their meta-analysis, Pettigrew and Tropp (2006) concluded that even though Allport’s (1954) conditions facilitate the contact effect, positive outcomes even emerge in the absence of several of the proposed conditions. An important question arising here is how interracial public-police contact is related to the attitudes of police officers toward immigrants, given the situational conditions that are in contradiction to the proposed conditions. Suggestive but inconclusive evidence regarding this issue has been obtained by Liebkind, Haaramo, and Jasinskaja-Lahti (2000) who examined attitudes toward immigrants among various professional groups including police officers. It was reported that contact quality, as indicated by the degree of familiarity of the immigrant who respondents knew best, improved attitudes toward immigrants, even in unequal and non-voluntary contact situations.

Unfortunately, instances of negative intergroup contact may occur more frequently during police work, overruling the potential effects of high quality contact. Dhont and Van Hiel (2009) found in a general community sample that even though negative contact occurs less frequently than positive contact, negative contact had the strongest impact on prejudice, which may be attributed to a higher emotional salience of negative experiences. Along similar lines, Boniecki and Britt (2003) discussed the relationship between negative contact and prejudice of soldiers during peacekeeping operations abroad. Similar to police officers, soldiers often hold negative outgroup attitudes (e.g., Bosman, Richardson, & Soeters, 2007). However, peacekeeping forces are also likely to experience hostile encounters with the local population that foster feelings of threat and anxiety, which eventually strengthen their negative attitudes even more (Boniecki & Britt, 2003).

Given the likelihood of negative contact with ethnic minority members during police work, the relationship between negative contact and racial prejudice may also be exacerbated in a police context. Indeed, police officers may be forced to deal with a lot of unpleasant situations involving members of ethnic minorities, leading to stronger associations between the amount of negative contact with prejudiced attitudes and, eventually with their behavior toward ethnic minority members.

In sum, the available evidence suggests that positive interracial public-police contact is linked to less prejudiced attitudes among police officers, and ultimately to less racially biased behavior. Conversely, negative contact between police officers and immigrants is expected to be related to more prejudiced attitudes, and eventually to more racially biased behavior. Therefore, the present study investigates the relationships between interracial public-police contact (positive and negative) and police-officers'

attitudes and behavior toward immigrants and aims to demonstrate an indirect relationship between intergroup contact and their behavior through police officers' prejudiced attitudes.

1.2. Intergroup contact and work-related outcomes

A host of studies has examined the relationships between intergroup contact and specific intergroup variables (e.g., prejudice, intergroup anxiety, discrimination, and stereotyping). However, bearing in mind Pettigrew's (2008) argument that intergroup contact also needs to be viewed in its' specific institutional settings and larger societal context, it is somewhat surprising that other, relatively more distal outcome variables have received little attention. Indeed, the study of intergroup contact within, for example an organizational context makes it possible to investigate relationships with a broader range of variables that are highly relevant in that particular context as well. Frequent intergroup contact 'on the job' may thus be related to workers' perceptions and attitudes toward their work and organization. In the context of police work, there are regular interactions with immigrants and the valence and amount of this contact constitutes an inherent and important part of police work. It is therefore likely that these experiences are linked to other work-related attitudes and behavior. Uncovering such relationships would not only broaden the theoretical framework in which intergroup contact can be studied but would also significantly extend its applied relevance. Therefore, in the present study we broaden the traditional intergroup contact research questions by examining the potential relationship between contact and two important work-related variables: procedural fairness perceptions and organizational citizenship behavior (OCB).

Procedural fairness refers to the extent to which people consider the procedures used by the organization and hierarchical authorities to arrive at outcomes as fair. In particular, Leventhal (1980) proposed that procedural fairness is based on elements such as the opportunity for voice and the perception of procedures to be consistent, free of bias, accurate, correctable, and ethical. Some authors have argued that procedural fairness also includes issues of interpersonal treatment, such as politeness, respect, and dignity (e.g., Tyler & Blader, 2000; Tyler & Lind, 1992).

Although procedural fairness is commonly defined as originating from (an authority within) the organization, the multifoci justice model of Cropanzano, Byrne, Bobocel, and Rupp (2001) emphasizes the presence of multiple sources of (un)fairness, especially in terms of interpersonal treatment, at the level of the organization, supervisor, co-workers or, important in this context, customers (e.g., Rupp & Spencer, 2006; Spencer & Rupp, 2009). Indeed, Rupp and colleagues demonstrated that employees perceive customers as a potential source of unfairness, which influences employees' adherence to organizational guidelines regarding emotional display rules (i.e., emotional labor). In particular, they demonstrated that injustice perceptions can be triggered by contact with impolite, rude, disrespectful, and deceitful customers.

Even though the multifoci model of fairness assumes the strongest effects to occur at the level of the source of the injustice, there is also evidence of cross-over effects, suggesting that fairness perceptions caused by one source may also spill over to and affect outcomes related to a different source (Liao & Rupp, 2005). This notion can be traced back to social information processing theory which claims that individuals gather information from one's direct social context to judge organizational policies, leaders, and practices (Salancik & Pfeffer, 1978). Hence, we would not only expect

negative contact (characterized by impoliteness, a lack of respect, etc) with immigrants to be related to perceptions of ‘customers’ (i.e., prejudice), but these perceptions may also be related to perceptions of other potential fairness sources in the work environment as well, such as organization-focused fairness.

In the context of this study, we thus expect intergroup contact to be associated with fairness perceptions related to the organization as well. Indeed, because an important part of police officers’ job is to interact with immigrants, positive or negative intergroup contact may be closely entangled with fairness perceptions. For example, hurtful and undeserved criticism, exaggerated accusations and derogations from immigrant civilians might not only be associated with police officers’ levels of prejudice toward immigrants, but could also be linked to the extent to which they perceive their organization as fair. More specifically, frequent pleasant and constructive public-police contact is assumed to be accompanied by the perception of a positive, supportive and fair working climate, or in other words, by increased levels of police officers’ procedural fairness perception whereas frequent negative contact may be accompanied by the perception that one is not being sufficiently backed by the organization when encountering immigrants, and thus, associated with lowered levels of perceived organizational fairness. An additional interesting issue here is to look at the extent to which positive intergroup contact can counteract the relationship between negative intergroup contact and organization-focused fairness perceptions (for a similar suggestion, see also Spencer & Rupp, 2009).

While it is theoretically interesting to examine the links between intergroup contact and organizational procedural fairness perceptions, from a more applied point, it is even more important to focus on a behavioral work-related variable, that is, on

organizational citizenship behavior (OCB). OCB is generally conceived as voluntary extra-role behavior that is beneficial to the organization (Organ, 1990), and which is known to predict productivity and profitability at the organizational level (Koys, 2001; Podsakoff, Ahearne, & MacKenzie, 1997). Procedural fairness, especially organization focused procedural fairness, is considered as an important antecedent of an employee's willingness to perform OCB (e.g., Konovsky & Cropanzano, 1991; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Indeed, employees' procedural fairness perceptions not only enhance overall job satisfaction, compliance, and the motivation to do the required tasks, but also motivates employees to go beyond their prescribed role requirements. These voluntary prosocial behaviors are not driven by reinforcements or punishments, but instead motivated by the perception that the organization has one's best interests in mind (Cropanzano & Schminke, 2001) and can be trusted not to exploit its employees (De Cremer & Tyler, 2005). We therefore assume that the previously hypothesized relationships between intergroup contact and procedural fairness perceptions, in turn, translates itself into indirect relationships between intergroup contact and OCB's via procedural fairness perceptions.

1.3. The present research

The present study focuses on the frequency of positive and negative contact of Flemish (from the Dutch speaking part of Belgium) operational police officers with immigrant citizens. The term immigrants refers here to its consensual meaning in Flanders to denominate members of ethnic minorities with non-European roots, and particularly to people from countries with a Muslim majority, with Moroccans and Turks constituting the two largest immigrant communities in Belgium.

In particular, we examine the relationships between the amount of positive and negative interracial public-police contact and police officers' levels of prejudice toward immigrants, as indicated by prejudiced attitudes as well as self-reported prejudiced behavior. At the same time, we examine the relationships between the amount of positive and negative intergroup contact and work-related perceptions and behavior, as indicated by procedural fairness perceptions and OCB. Based on the literature discussed in the introduction, the following hypotheses are formulated.

Hypothesis 1a. The amount of positive intergroup contact is negatively related to police officers' levels of prejudiced attitudes toward immigrants, while negative contact is expected to be positively related to their prejudiced attitudes.

Hypothesis 1b. Police officers' prejudiced attitudes are expected to be positively and directly related to their prejudiced behavior toward immigrants, while intergroup contact (positive and negative) is expected to be indirectly related (i.e., negatively and positively, respectively) to prejudiced behavior toward immigrants through prejudiced attitudes.

Hypothesis 2a. The amount of intergroup contact (positive and negative) is related (i.e., positively and negatively, respectively) to positive work-related perceptions, i.e., procedural fairness perceptions.

Hypothesis 2b. Procedural fairness perceptions is expected to be positively and directly related to OCB, while intergroup contact (positive and negative) is indirectly related (i.e., positively and negatively, respectively) to OCB through police officers' procedural fairness perceptions.

2. Method

2.1. *Participants*

Respondents were 188 police officers recruited among the active members of the operational staff of one small and two middle-sized local police corps in Flanders (i.e., the Dutch speaking region of Belgium) counting a total of 527 police officers across the three corps (83, 185, and 259 respectively). Data from 16 respondents were excluded from analyses because of too many missing values. The sample ($N = 172$; $n_1 = 22$, $n_2 = 77$, and $n_3 = 72$ for the separate corps, respectively) comprised 143 males, 28 females and 1 respondent did not indicate his or her sex.

Respondents' age ranged from 21 to 60 years ($M = 40.89$, $SD = 9.94$) and their seniority from 1 to 44 years ($M = 18.07$ years, $SD = 10.07$). None of the respondents belonged to an ethnic minority group and respondents reported being non-Muslim citizens. Nine percent of respondents were (chief) commissioners, 20% were chief inspectors (i.e., superintendents), 66% were inspectors (regular police officers equivalent to constables) and 5% were auxiliary officers. The distribution of these sample characteristics largely mirrors the distribution of these characteristics in the police corps.

Overall, respondents indicated on a 7-point scale ranging from 1 (Never) to 7 (Very much) to have frequent contact with immigrant citizens during work ($M = 5.48$), however commissioners reported somewhat less contact ($M = 3.27$) compared to the three other categories ($M = 5.53$).

2.2. Measures

Means and standard deviations for all scales described below are presented in Table 1, along with their correlations. All measures were administered in Dutch.

2.2.1. Intergroup contact

Quantity of positive and negative intergroup contact was measured with an adapted version of the intergroup contact measure of Dhont and Van Hiel (2009) based on Islam and Hewstone (1993). The measure consisted of four items for each contact type and had to be rated on 7-point Likert scales ranging from 1 (Never) to 7 (Very much). We explicitly asked respondents to consider only ‘intergroup contact with immigrant citizens (no colleagues) during working hours, e.g., during interventions.’ The four positive contact items ($\alpha = .84$) measured how often during work they have (1) friendly contact, (2) pleasant contact, (3) constructive contact, and (4) positive experiences with immigrant citizens. The four negative contact items ($\alpha = .93$) measured how often during work they have (1) conflicts, (2) unpleasant contact, (3) hostile contact, and (4) negative experiences with immigrant citizens.

In order to check the dimensionality of the positive-negative intergroup contact scales we entered the eight intergroup contact items into a principal-component analysis. This analysis clearly revealed a two-factor solution, accounting for 76% of the variance. Factor loadings after OBLIMIN-rotation showed that all negative contact items loaded strongly onto the first factor (loadings $> .90$), while the positive contact items loaded strongly onto the second factor (loadings $> .75$), with no absolute cross-loadings larger than .13. The two components showed no correlation, $r = .01$.

Hence, this principal component analysis indicated that both types of contact can indeed be differentiated (see also, Aberson & Gaffney, 2009; Dhont & Van Hiel, 2009) and we therefore employ separate averaged scores for the four positive contact items and the four negative contact items in the remainder of our analyses. Unlike previous studies in a more general population (Aberson & Gaffney, 2009; Dhont & Van Hiel, 2009), but in line with our expectations given the specific police context, participants

reported significantly more negative contact than positive contact, $t(171) = 4.54, p < .001$.

2.2.2. *Prejudice*

To measure police officers' *prejudiced attitudes*, participants completed an adjusted 9-item version of McConahay's (1986) Modern Racism Scale on a 5-point Likert scale (1 = Strongly disagree; 5 = Strongly agree). The original items were first translated in Dutch and then adjusted to the Belgian context. The scale has been pretested in several student and adult samples with satisfactory indexes of validity and reliability and has also been used by Roets and Van Hiel (in press). The scale consists of three facet scales: three items assessed the denial of continuing discrimination, e.g. 'Discrimination against immigrants is no longer a problem in Belgium', three items assessed antagonism toward immigrants' demands, e.g., 'Immigrants are getting too demanding in their push for equal rights', and three items assessed resentment about special favors for immigrants, e.g., 'Immigrants are receiving too little attention in the media' (reverse scored). The complete nine-item scale proved to be internally consistent ($\alpha = .75$).

Three items assessed *prejudiced behavior* ($\alpha = .78$) on a 7-point Likert scale (1= Strongly disagree; 7 = Strongly agree), e.g., 'When problems with immigrants occur, I tend to behave harsher than with problems with non-immigrants' and 'I act more firmly when I am confronted with a problem in which immigrants are involved'.

2.2.3. *Measures related to the organization*

Respondents completed measures of procedural fairness perceptions and OCB on 5-point Likert scales ranging from 1 (Certainly not) to 5 (Certainly). To measure *procedural fairness perceptions* participants were asked to rate the seven items ($\alpha = .87$)

of Colquitt's Procedural Fairness scale (2001) (see also De Cremer & Van Hiel, 2006), concerning the procedures applied by their organization when making decisions about their job. Sample items are 'Are you able to express your views and feelings during those procedures?' and 'Are those procedures based on accurate information?'

OCB or extra-role behavior, was assessed with seven items ($\alpha = .83$) based on Konovsky and Organ (1996) and on Tyler and Blader (2000). Sample items are 'I volunteer to help others when they have heavy workloads' and 'I put an extra effort into doing my job well, beyond what is normally expected from me'.

2.4. Data-preparation, analyses and fit criteria

We tested our predictions using structural equation modeling (SEM) with latent variables (LISREL, version 8.71, Jöreskog & Sörbom, 2004). Based on the covariance matrix among items SEM tests the extent to which variations in one variable corresponds to variations in one or more variables. Compared to zero-order correlations, SEM is more versatile because it allows to test the interrelationships of multiple variables simultaneously and is able to model measurement error. Moreover, SEM permits modeling of indirect relations between variables (i.e., mediation models) and also estimates the strength and the significance of such indirect relations. Following the recommendations of Bagozzi and Heatherton (1994), we adopted a partial disaggregation approach for scales consisting of more than five items in order to maintain an adequate ratio of cases to parameters and to increase the reliability of our indicators. As such, for prejudiced attitudes, procedural fairness perceptions, and *OCB*, we averaged subsets of items to create three indicator parcels for each construct. For positive and negative contact and for prejudiced behavior, the items served as indicators.

We investigated Hypotheses 1a and 1b by fitting a model (Model 1) in which positive and negative intergroup contact are directly related to prejudiced attitudes as well as indirectly related to prejudiced behavior via prejudiced attitudes. Furthermore, to investigate Hypotheses 2a and 2b, intergroup contact variables were modeled to test the direct relations with procedural fairness perceptions as well as to test the indirect relationship with OCB via procedural fairness perceptions. To test the strength of the direct versus indirect relationships between contact and behaviors, we also tested whether the addition of the direct paths between contact and the behavioral variables (i.e., prejudiced behavior and OCB), would improve the fit of Model 1.

The goodness-of-fit was assessed using the Chi-square test, the comparative fit index (CFI), the root-mean-square error of approximation (RMSEA), and the standardized root-mean-square residual (SRMR). Following standard recommendations, a satisfactory fit is indicated by a Chi-square lower than double the degrees of freedom, a CFI value greater than .95, an RMSEA value of less than .06, and a SRMR value of less than .08 (Hu & Bentler, 1999).

3. Results

3.1. Hypotheses 1a and 1b: Testing the relations between intergroup contact and prejudiced attitudes and behavior

Figure 1 presents the tested model (Model 1). This model indicated a good fit to the data, $\chi^2(163) = 217.75, p = .003$; CFI = .97; RMSEA = .044; SRMR = .068. As can be seen in Figure 1, all hypothesized relations were significant. More specifically, confirming Hypothesis 1a, positive and negative contact were, respectively negatively and positively, related to prejudiced attitudes, while in accordance with Hypothesis 1b police officers' prejudiced attitudes were significantly and positively related to their

prejudiced behavior toward immigrants. Furthermore, both positive and negative contact were significantly and indirectly related to prejudiced behavior via prejudiced attitudes, $IE = -.11, p < .01$ and $IE = .14, p < .01$, respectively.

3.2. Hypotheses 2a and 2b: Testing the relations between intergroup contact and procedural fairness perceptions and OCB

As can be seen in Figure 1 as well, and in accordance with Hypothesis 2a, both positive and negative contact were, respectively positively and negatively, related to procedural fairness perceptions. Furthermore, in accordance with Hypothesis 2b, procedural fairness was positively related to OCB, while both positive and negative contact were significantly and indirectly related to OCB via procedural fairness, $IE = .08, p < .05$ and $IE = -.18, p < .001$, respectively.

Finally, adding the direct paths from positive and negative contact to prejudiced behavior and OCB, which were not included in Model 1, did not significantly ameliorate the model fit, $\Delta\chi^2(3) = 2.44, ns$. Moreover, the additional direct paths from positive and negative contact to prejudiced behavior and to OCB were not significant. Therefore, Model 1 without these direct paths, as presented in Figure 1, is more parsimonious and is therefore preferred.¹

4. Discussion

The present study had two major aims. First, we wanted to investigate whether the frequency of positive and negative contact between police officers and immigrants is related to police officers' prejudiced attitudes and behavior toward immigrants. Simultaneously, we aimed to examine whether interracial public-police contact is related to the general work-related variables of procedural fairness perceptions and OCB.

The present study yielded corroborative evidence for our hypotheses. In line with Hypothesis 1a, we demonstrated that both positive as well as negative intergroup contact are significantly (respectively, negatively and positively) related to police officers' levels of prejudiced attitudes toward immigrants. Moreover, confirming Hypothesis 1b, police officers' prejudiced attitudes were significantly and positively related to prejudiced behavior toward immigrants and intergroup contact (positive and negative) demonstrated a significant indirect relationship with police officers' behavior toward immigrants through their prejudiced attitudes.

With respect to the relationship between intergroup contact and work-related variables, we hypothesized that intergroup contact (positive and negative) would be associated with police officers' general work-related perceptions and behavior because contact with immigrants constitutes an important and potentially stressful and demanding aspect of their work (Richeson & Shelton, 2007). The present results corroborated our hypotheses. In particular, in line with Hypothesis 2a we showed that intergroup contact (positive and negative) was significantly related to procedural fairness perceptions. Furthermore, in accordance with Hypothesis 2b, procedural fairness perceptions were positively related to OCB. This finding corroborates earlier research where perceived procedural fairness was linked to extra-role voluntary employee behaviors in a variety of settings (e.g., Konovsky & Cropanzano, 1991; Podsakoff, et al., 2000). Moreover, further in line with Hypothesis 2b, positive and negative contact were only indirectly related to OCB through procedural fairness perceptions.

In the present model, the significant relationships between prejudice and work variables can thus be explained by the sheer fact that both these variable types are

related to intergroup contact. The relationships between prejudice and work-related variables are thus grounded in the daily interaction between police officers and ethnic minority members. Hence, only to the extent that intergroup contact comes to the forefront during daily work experiences, people might use it as a cue for inferring levels of procedural fairness of their organizations and act accordingly through displaying OCB. This result clarifies that organizations should be attentive to their members' daily experiences and provide support and a listening ear, enabling them to reevaluate their recent encounters (Boniecki & Britt, 2003).

We first discuss our main findings, highlighting some important implications. In the remainder of the discussion we go further into some limitations of the present study and point out interesting avenues for future research.

4.1. Relationships between interracial public-police contact and police officers' prejudiced attitudes and behavior

With respect to the relationship between intergroup contact and police officers' attitudes and behavior toward immigrants, the present findings are in line with the contact hypothesis showing that positive intergroup contact was negatively related to police officers' levels of prejudice toward immigrants. Importantly, this finding demonstrates that even under conditions that seem to be in contradiction with the conditions formerly proposed as prerequisite (e.g. equal status, cf. Allport, 1954; Pettigrew 1998), the relationship between positive contact and prejudice still holds. Indeed, the context of policemen at work does not even closely resemble the cooperative setting envisaged by scholars advancing the contact hypothesis. This finding aligns well with Pettigrew and Tropp's (2006) conclusion that the proposed

conditions spelled out by contact theory may play a facilitating role rather than a necessary one.

Furthermore, negative contact experiences with immigrants were related to police officers' levels of prejudice as well. Importantly, the reported mean frequency of negative contact was quite high compared to the few negative contact experiences reported in the general community (e.g., Dhont & Van Hiel, 2009) or in student samples (e.g., Aberson & Gaffney, 2009). Moreover, police officers reported significantly more negative contact compared to positive contact. These findings, along with the result that negative contact shows a more pronounced relationship with prejudice than positive contact (see also Dhont & Van Hiel, 2009), demonstrate the importance of studying the effects of intergroup contact in specific samples, such as police officers. Indeed, the demonstrated benefits of positive contact become superfluous when negative contact occurs more frequently and shows stronger relations with prejudice than positive contact, not at least because it might be impossible to exclude negative intergroup contact experiences from police work.

However, police officers have considerable leeway in how they handle contact situations and, the present results suggest that this behavior is likely to be biased by their attitudes toward immigrants. As such, their actions will affect the quality of future intergroup contact situations which, in turn, may reinforce or even polarize the existing attitudes of immigrants toward the police. In sum, the attitudes and behavior of both parties toward each other are shaped by the same contact experiences, suggesting a vicious circle which is hard to break due to the predominant negative contact during the immigrant-police interactions.

Our findings resemble the observations and reports about peacekeeping operations in conflict areas (Boniecki & Britt, 2003). Soldiers on peacekeeping mission are often confronted with small groups of local citizens who may challenge the authority of the soldiers, as testified for instance by American soldiers deployed to Kazakhstan (Britt & Adler, 1999) or by Dutch soldiers who served in Bosnia (Soeters & Rovers, 1997). Such instances of negative contact may range from dishonest and disrespectful treatment to severe verbal and physical aggression. Indeed, peacekeepers have been the target of violent attacks from the people they are mandated to protect. Additionally, when operating in a non-Western context, cultural differences in values and norms between the Western soldiers and the local population often give rise to mutual misunderstandings (e.g., Soeters, Tanerçan, Varoglu, & Sigri, 2004). Although these hostile actions are usually initiated by only a small fraction of the local population, soldiers encountering hostilities from local citizens are likely to attribute this behavior to the group (Boniecky & Britt, 2003). As such, negative attitudes toward the local population are formed and strengthened, surfacing through the soldiers' behavior, which may jeopardize their mission. Our results suggest that similar mechanisms might be at play in public-police contact.

4.2. Relationships between interracial public-police contact and work-related variables

By demonstrating the relationships between intergroup contact and organizational fairness perception, the present findings uniquely contribute to both the organizational justice and intergroup contact literature. Indeed, the contact literature is in dire need of studies that examine variables beyond those directly associated with prejudice and studies that investigate contact within specific contexts. At the same time, the organization justice literature has only recently started to look into factors that

influence fairness perceptions that do not necessary emanate from within the organization (i.e., Rupp & Spencer, 2006; Spencer & Rupp, 2009).

The present results strongly reveal that daily work experiences with people outside the organization is related to how fair the organization itself is perceived. Because we did not compare the impact of negative intergroup contact to negative experiences with the public in general, our conclusions are necessarily limited to the link between intergroup contact and organizational procedural fairness perceptions. Still, our findings suggest that employees are not purely at mercy of the organizations' whims with respect to organizational fairness perceptions. Instead, individuals within an organization actively construct organizational fairness perceptions based on both their experiences within the organization as well as on encounters with the public during their working hours.

This finding aligns partly with previously demonstrated examples where employees' fairness perceptions were influenced by contact with external sources when this interaction constituted a substantial part of the job (Rupp & Spencer, 2006). Moreover, our results fit within a cross-level multifoci perspective of procedural justice where the antecedents of injustice resulting from contact with the public are generalized to unfairness perceptions of the organization (Liao & Rupp, 2005).

Interestingly, similar to the contact-prejudice relationships, the work variables (i.e., procedural fairness perceptions and OCB) were more strongly related to negative contact than to positive contact. Hence, while positive contact might counter to some degree negative contact experiences, this latter type of contact still showed the strongest relations with the work variables. More frequent negative contact may also be related to work related variables through other processes than those presently studied. Indeed,

after large-scale Belgian police reforms in 1998, community oriented policing became the official model. This approach includes an emphasis on partnerships with members of ethnic minorities in a climate of mutual respect, propagating positive intergroup contact. Importantly, while this model of policing was embraced by the higher level police authorities, it might be perceived as being soft and unrealistic by operational police officers (e.g., Easton et al, 2009). Hence, it is possible that not only negative intergroup contact in itself ‘spills over’ to procedural fairness perceptions of the organization, but that the additional clash between the organization’s ideals and the harsh reality of frequent negative contact might further strengthen police officers’ negative perceptions of their organizations’ procedural fairness.

An important consequence of linking intergroup contact to fairness perceptions relates to the indirect relationships of intergroup contact with employees’ behavior during their work, at least in the context of public-police contact. Indeed, the results of the present study not only show that intergroup contact is related to prejudiced attitudes and behavior but also (indirectly) to constructive extra-role behavior toward colleagues and superiors. Hence, since two vital elements of the police job are involved, the present findings highlight the importance of actively coaching police officers in their contact with immigrants. Such investments from police organizations are needed not only because correct behavior toward immigrants is highly desired, but also in order to retain and attract motivated police officers who are feeling at home in their organization.

4.3. Limitations and directions for future research

An important limitation of the present study concerns the use of a cross-sectional design which implies that we cannot make causal inferences about the significant relationships. A solution to this problem would require a longitudinal design. As in most

intergroup contexts it is likely that these relationships work in a bi-directional way. Previous research on the contact-prejudice relationship has indeed revealed that intergroup contact typically predicts prejudice, but at the same time prejudiced people are likely to avoid most instances of intergroup contact (e.g., Pettigrew et al., 2007; Pettigrew, 2008).

Secondly, because of the strong relations between negative contact and police officers' attitudes and behavior, the concluding message of the present study does not seem to be particularly encouraging. Furthermore, finding effective strategies that can break the negative spiral may prove to be a major challenge. However, we only considered immigrant-police contact during working hours, while it might be more hopeful to consider contact with immigrants in police officers' personal lives as well. Indeed, Peruche and Plant (2006) demonstrated that when police officers had positive intergroup contact outside of work, their attitudes and beliefs about Black's violence were less negative, resulting in less negative behavior (i.e., a decreased bias of shooting unarmed Black suspects on a shooting simulation). These authors suggested that positive contact outside of work counteracts the large degree of negative contact with Blacks during work. Hence, while the effects of positive contact on the job may be overruled by negative contact experiences during police work, positive contact in police officers' personal lives may counteract the effects of negative contact on the job.

Footnotes

1. We also tested the fit of a competing Model 2 where positive and negative contact were considered as ‘outcomes’ of prejudiced attitudes and behaviors and procedural fairness perceptions and OCB. Even though this alternative model fitted the data relatively well, it did not fit as well as Model 1, $\chi^2(163) = 266.39$, $p < .0001$; CFI = .96; RMSEA = .061; SRMR = .102. Model 1 was therefore preferred.

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Table 1. Means, Standard deviations, and Correlations among measures

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Positive contact	3.38	1.25	-					
2. Negative contact	4.12	1.72	.01	-				
3. Prejudiced attitudes	3.35	.62	-.33 ^{***}	.36 ^{***}	-			
4. Prejudiced behavior	2.92	1.37	-.08	.24 ^{***}	.30 ^{***}	-		
5. Procedural fairness	2.87	.76	.11	-.37 ^{***}	-.26 ^{***}	-.12	-	
6. OCB	3.73	.60	.20 ^{**}	-.16 [*]	-.12	-.05	.35 ^{***}	-

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

Figure Captions

Figure 1. Structural equation model (Model 1) of the relationships between positive and negative intergroup contact with prejudiced behavior via prejudiced attitudes and with OCB via procedural fairness perceptions. * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 1

