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Does negative contact undermine attempts to improve intergroup relations? Deepening the understanding of negative contact and its consequences for intergroup contact research and interventions

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Abstract

Intergroup contact is an established pathway to improve intergroup relations. Research has long focused on mainly positive intergroup contact and its capability to improve intergroup relations. Yet, if members of different groups meet, they will not only make positive, but possibly also negative intergroup contact experiences. Recent research considering both positive as well as negative intergroup contact has raised concerns about potentially stronger effects of negative compared to positive contact. These new insights and the increasing awareness of potentially detrimental effects of contact could lead to doubts about whether it is always sensible to bring individuals from different groups together. Our article first updates the latest review on joint effects of positive and negative intergroup contact. We find that there is no clear tendency for either positive or negative intergroup contact to yield stronger effects on intergroup relations, and we portray factors that might influence these effects. Such factors—for example an individual's prior experiences—could play a crucial role in defining the relevance of negative contact

in everyday settings. We continue by answering calls to increase a more qualitative understanding of what kinds of experiences are seen to be intergroup contact, and where intergroup contact in everyday life is experienced from a lay understanding, with new qualitative data from British White and British Asian individuals. Our results demonstrate that positive as well as negative contact is often rather casual and happens in public spaces and at work. Interventions explicitly addressing these spaces may help to reach more people. We also demonstrate that positive contact is much more frequent than negative contact. This finding is confirmed in the third section, which reviews the relative frequency of positive and negative intergroup contact. Last but not least, we discuss the implications of our review for practitioners and researchers alike.

KEYWORDS

contact prevalence, intergroup contact, negative intergroup contact, valence asymmetry

Ongoing discrimination and marginalization of social groups constitutes a major challenge for societies. Social science in general and social psychology in particular can help discern ways to mitigate prejudice and hence to prevent intergroup conflict. One well-studied psychological pathway to improve intergroup attitudes and increase cooperation between social groups is positive intergroup contact (Lemmer & Wagner, 2015; Pettigrew & Tropp, 2006): When individuals from different groups meet, having positive experiences with an individual from another group is likely to generalize to the perceptions of other members of that group (Brown & Hewstone, 2005). In other words, positive intergroup contact with a member of a social group can enhance attitudes towards the whole group. This prejudice-reducing effect of positive contact experiences is a crucial factor in establishing more harmonious intergroup relations in diverse communities and societies (e.g., Hewstone, 2015).

Yet, while research on intergroup contact has acknowledged from its very beginnings that intergroup contact might also be negative (e.g., Allport, 1954; Amir, 1969), the interplay of both positive and negative contact in shaping intergroup relations has only recently gained attention in this field of research (e.g., Paolini et al., 2010). Recent research on positive and negative intergroup contact, however, has provided evidence that negative intergroup contact might increase prejudice more than positive intergroup contact decreases it (Barlow et al., 2012; Graf & Paolini, 2017). Scholars in the field have seen this asymmetry of positive–negative contact effects as an important societal phenomenon that explains why intergroup conflict in diverse settings endures (Barlow et al., 2012), despite opportunities for intergroup contact experiences having increased over time (Christ et al., in press).

Negative contact is likely to be particularly relevant in applied contexts outside the laboratory where it is especially hard to achieve optimal contact conditions (Dixon et al., 2005). For exam-

ple, Guffler and Wagner (2017) studied Jewish Israeli and Arab Israeli students in an intergroup contact intervention. Contrary to the authors' expectations, Jewish Israeli students reported worse attitudes towards Arab Israeli students following this contact intervention. Aiming at finding explanations for a lack of positive effects of the intergroup contact program, the authors analyzed open responses describing participants' experiences during the intervention. They found that unintended negative intergroup contact experiences had impeded potential positive effects of the intervention. This finding illustrates that it is indeed of crucial importance to the implementation of interventions and the design of policies to take intergroup contact research beyond the mere study of positive intergroup contact experiences, and to recognize the role of negative intergroup contact if members of different groups come or are brought together.

The present article provides a state-of-the-art overview of the emerging field of research on positive and negative intergroup contact. One central critique of intergroup contact research is that negative intergroup contact as part of everyday experiences with outgroup members has largely been neglected (e.g., Dixon et al., 2005). Since the first prominent attempts to address this critique (e.g., Barlow et al., 2012; Paolini et al., 2010), the amount of research considering both positive and negative contact has increased impressively. We therefore update previous reviews (e.g., Graf & Paolini, 2017) and critically reflect on current developments in this new field of intergroup contact research.

Research on positive and negative intergroup contact is strongly influenced by early studies that raised the possibility that negative contact might undermine the positive effects of bringing groups into contact (e.g., Barlow et al., 2012). These concerns are of high relevance for applied settings, especially if practitioners, decision-makers or lay people read them as a reason to doubt the efficacy or the safety of bringing individuals from diverse backgrounds into intergroup contact. We will therefore first examine the current evidence regarding such a potentially stronger effect of negative intergroup contact. Moreover, we will review factors that are currently discussed as influencing positive and negative intergroup contact effects.

To illustrate the relevance of positive and negative intergroup contact for our everyday lives and to build a shared understanding of what negative intergroup contact is and where it takes place, we next address calls for contact research—especially in the realm of negative intergroup contact—to take a more qualitative look at situations of intergroup contact (e.g., Keil & Koschate, 2020; McKeown & Dixon, 2017). This is done by presenting first insights from a large qualitative British sample.

Building on these insights, we finally elaborate on the idea of Graf and Paolini (2017) that a higher frequency of positive contact might compensate for potentially stronger effects of negative contact, by reviewing the frequency of positive and negative contact in the current literature. We thereby extend research by Graf et al. (2014) and Pettigrew and Tropp (2011), who first elaborated on the greater frequency of positive compared to negative contact. Throughout the article, we review the research to date and include data from the most recent studies from our own laboratories. Finally, we discuss practical implications of the emerging field of research on the joint effects of positive and negative intergroup contact.

For practical reasons, this article focuses on direct contact experiences since this is at the center of the majority of research on negative contact to date. Intergroup contact in this review is focused on direct intergroup contact, meaning that within the intergroup contact situation at least two individuals from different groups interact face to face. Hence, indirect forms of contact, such as observing intergroup contact, learning about friends having intergroup contact or intergroup contact reported on the media, are beyond the scope of the present article. However, we acknowledge the importance of both positive and negative indirect contact (for a broader discussion, see White

et al., 2020) and will discuss the importance of addressing valenced indirect contact in future work.

THE EMERGING FIELD OF RESEARCH ON POSITIVE AND NEGATIVE CONTACT

Research on intergroup contact builds on a long tradition—going back to the 1940s and 1950s (e.g., Allport, 1954; Williams, 1947). To date, impressive evidence supports the hypothesis that when individuals of different groups have positive contact with members of the other group, these individuals show more positive attitudes and less prejudice towards the respective outgroup as a whole (e.g., Lemmer & Wagner, 2015; Pettigrew & Tropp, 2006). Based on this ample evidence, researchers in the field of intergroup contact theory have long been at the forefront of providing research results with high relevance for applied settings: by designing interventions (e.g., the jigsaw classroom, Aronson & Patnoe, 1997), testing their efficacy (e.g., Lemmer & Wagner, 2015) and engaging in active policy advice and public discussions (e.g., Dixon et al., 2005).

Yet, already in 1954, Gordon Allport, who was preeminent in providing a framework for the prejudice-reducing effects of intergroup contact, pointed out that it "has sometimes been held that merely by assembling people without regard for race, color, religion, or national origin, we can thereby destroy stereotypes and develop friendly attitudes. The case is not so simple" (p. 261). From its very beginnings, intergroup contact theory recognized that contact would not always be positive, and stressed that negative contact might even increase intergroup conflict (Graf & Paolini, 2017). Still, aiming to improve intergroup relations, intergroup contact researchers' main focus has been on positive forms of intergroup contact, such as intergroup friendship (e.g., Graf & Paolini, 2017; Pettigrew & Tropp, 2006).

In the broader field of social psychology, negative intergroup experiences and settings have long been a central theme, represented, for example, in the research on categorization (e.g., Tajfel et al., 1971), intergroup conflict (e.g., Sherif, 1966), intergroup threat (e.g., Stephan & Stephan, 2000), discrimination (e.g., Pascoe & Smart Richman, 2009), and collective action (e.g., van Zomeren et al., 2008). Yet, within the realm of intergroup contact research, consequences of negative contact experiences have comparably seldom been considered empirically.

Only recently, stimulated by a landmark article by Paolini et al. (2010), the field shifted the focus from purely examining the effects of positive contact to the empirical consideration of negative contact alongside the well-known effects of positive contact. With evidence from a laboratory experiment and a two-wave longitudinal study, Paolini et al. (2010) demonstrated that negative contact increased category salience more strongly than positive contact. Because category salience is known to facilitate the generalization of intergroup contact effects to the whole group, these findings imply that negative contact might have stronger (negative) effects on intergroup attitudes than positive contact.

Building on this theorizing, Barlow et al. (2012) proposed a *positive–negative asymmetry of intergroup contact* effects, stating that negative contact has stronger effects on outcomes related to intergroup relations than positive contact. The authors first tested the interaction of contact quality and quantity on prejudice towards Black and Muslim Australians, as well as towards asylumseekers. They found that in all cases contact of low quality (i.e., negative contact) had stronger effects. In a second study the frequency of participants' positive and negative contact was measured separately. Again, negative contact had a stronger effect on racism and contact avoidance than positive contact. First theoretical explanations as to why and when negative contact might

yield stronger effects than positive contact will not be discussed here (e.g., risk aversion, epistemic defense, and ingroup enhancement), but can, for example, be found in Paolini and McIntyre (2018).

Despite some convincing research and first theorizing tapping into the question of why negative contact might yield stronger effects than positive contact, the overall evidence for the positive–negative valence asymmetry of intergroup contact effects is mixed. While a number of studies support the initial findings by Barlow et al. (2012) and also reported stronger effects of negative than positive contact (Alperin et al., 2014; Dhont & Van Hiel, 2009; Graf et al., 2014; Labianca et al., 1998; Paolini et al., 2010, 2014; Techakesari et al., 2015; for first meta-analytical evidence see Paolini & McIntyre, 2018), others found no substantial differences in the effects of positive and negative contact (Árnadóttir et al., 2018; Mazziotta et al., 2011). Moreover, in some other cases, effects of positive intergroup contact were even found to exceed those of negative intergroup contact (Brylka et al., 2016; Mähönen & Jasinskaja-Lahti, 2016; Reimer et al., 2017).

First research suggests that these divergent findings might partially be due to different precontact expectations towards the respective outgroups (e.g., Zingora et al., 2020), or to different outcome measures used in different studies. Although they found opposing results to Zingora et al. (2020), Paolini and McIntyre (2018) in a meta-analysis including 59 tests of individual to group generalizations, also examined the effects of prior expectations towards an outgroup. They found that positive information about outgroup members had a greater impact on evaluations of positively stereotyped outgroups, whereas negative contact had a greater impact on the evaluations of negatively stereotyped outgroups. Additional explanations for the mixed findings focused on specific outcome variables: Based on results from a large data set from New Zealand, Barlow et al. (2019) suggest that positive contact might have a greater effect on positive emotions (i.e., warmth), whereas negative contact has a stronger effect on negative emotions (i.e., anger). Aberson (2015), on the other hand, examined whether positive and negative contact would differentially influence affective and cognitive factors. His results suggest that affective factors are influenced by both positive and negative contact, whereas cognitive factors are mainly affected by negative contact. Although these initial sets of studies do not allow for strong conclusions, they indicate that whether positive or negative contact yields larger effects might depend on the respective outgroup and the measure of outgroup evaluation in question.

Another strand of research argues that comparing the magnitude of effects for positive and negative contact might not adequately represent the complexity of intergroup relations in real-world settings: Instead, preliminary findings suggest that the effects of positive and negative intergroup contact interact. Such a potential interaction of positive and negative intergroup contact could also be an explanation for the mixed results. Cross-sectional research by Árnadóttir et al. (2018) provided first evidence for a more complex interplay between positive and negative contact experiences. The authors show that for respondents with higher levels of positive contact, a weaker association between negative contact and outgroup evaluations was observable, whereas for respondents with high levels of negative contact, a stronger association between positive contact and outgroup evaluations was found. Barlow et al. (2019) first present cross-sectional evidence too, which yields similar results: In 15 of 16 cross-sectional analyses in a large multiwave data set from New Zealand, they find that positive contact has a stronger relation with warmth if participants also reported higher levels of negative contact. Additionally, negative contact had a stronger relation with increased anger at low levels of positive contact (again in 15 of 16 analyses; for further cross-sectional data with mixed results see also Hayward et al., 2017, Supplementary Material). Despite these informative initial findings, it has to be kept in mind that Árnadóttir et al. (2018) relied on cross-sectional data, which limit the potential to interpret and generalize the results. Leaving

the realm of mere cross-sectional analysis and considering change scores, only two of 24 analyses found a significant interaction, which was qualified in a different direction: When change in negative contact was low (compared to high), positive contact predicted change in warmth more strongly. Further longitudinal evidence from Ten Berge et al. (2017) did not find any interactions between positive and negative intergroup contact. Importantly, however, the authors only considered whether an increase in outgroup best friends would buffer the effects of having outgroup foes, which might not tap into the full scale of positive and negative experiences. Thus, to date, longitudinal evidence for interactions of positive and negative intergroup contact over time remains scarce.

Paolini et al. (2014) chose another approach to test for potential interactions of intergroup contact experiences over time. They examined whether a self-reported history of contact experiences affects subsequent intergroup contact effects and found that for participants recalling more intergroup contact in the past, negative intergroup contact has a weaker effect on group-based responses (i.e., category salience) than for participants recalling fewer levels of intergroup contact.

This research by Paolini et al. (2014) has highlighted the important thought that a temporal dimension, such as the individual's history of intergroup contact, might play a key role when it comes to understanding the joint effects of positive and negative intergroup contact (see also MacInnis & Page-Gould, 2015; Paolini et al., 2016). To test the effects of an individual's history of intergroup contact on subsequent valenced intergroup contact effects, Paolini et al. (2014, reported above), in line with most previous intergroup contact research, examined the effects of overall contact over larger time spans. In contrast, in our research (Schäfer, Simsek et al., 2021) we focused on single instances of valenced intergroup contact over small time spans to acknowledge that, in everyday experiences, individuals will have many typically day-to-day experiences with outgroup members, which may consist of a varying order of positive and negative experiences. To model this complexity, we used an adapted version of a behavioral game where participants could either cooperate with or defect members of their own or of another group for a sequence of up to 23 interactions, and would also make the experience of being rejected or cooperated with (see also Dorrough et al., 2015). We thereby measured expectations towards the constantly changing interaction partners for each round. The only available information for the participants on which to estimate their expectations of the anonymous individuals they were playing with was the respective partner's group membership. In two different settings (i.e., age groups, Dutch, and international students), we found that a history of negative intergroup contact compared to a history of positive intergroup contact decreased subsequent intergroup contact effects on future expectations towards the outgroup. The history of ingroup experiences, however, did not moderate subsequent ingroup contact effects. Our results are in line with previous research on the violation of valenced expectations (e.g., Austin & Walster, 1974; Burgoon, 1993). Yet our findings are in contrast to those of Árnadottir et al. (2018) who analyzed a cross-sectional analysis of overall interaction levels of positive and negative intergroup contact. This suggests that different psychological mechanisms may be at play for overall levels of intergroup contact over larger time spans and specific instances of intergroup contact within specific situations.

In addition to previous valenced contact experiences, further aspects—such as intimacy (i.e., Graf et al., 2018) and intensity (i.e., Schäfer, Kros et al., 2021) of the respective experiences—might influence the effects of positive and negative intergroup contact differentially, and thus help to explain the large variety of results regarding a potential assymmetry of positive and negative intergroup contact effects. For example, Graf et al. (2018) showed that positive contact in intimate intergroup relationships (e.g., intergroup contact with romantic partners, family, and friends) leads to

the most positive attitudes, compared to positive contact in more casual (e.g., short contact in public spaces) or formal relationships (e.g., encounters in situations where roles are defined by official roles, such as while eating out or between teachers and pupils), and negative contact in all forms of relationships. Intimacy had a protective function in the realm of negative contact: Negative contact in intimate relationships had smaller effects on intergroup attitudes than negative contact in non-intimate relations (see also Fuochi et al., 2020). In a similar vein, our own research demonstrates that an increase in intensity in the realm of positive contact has larger effects than in the realm of negative contact; whereas increasing negativity did not increase the effects of negative contact on outgroup attitudes accordingly (Schäfer, Kros et al., 2021).

To sum up, the wake-up call by Paolini et al. (2010) to consider the joint effects of positive and negative intergroup contact has already inspired much innovative research in the past 10 years. We believe that research in the realm of negative contact has opened up new and important pathways to think about intergroup contact specifically, and intergroup relations in general: For example, to consider the intimacy (e.g., Graf et al., 2018) and intensity (Hayward et al., 2017) of intergroup experiences, or to take a closer look at temporal dimensions (i.e., whether we are considering single instances of intergroup encounters, or overall scores of intergroup contact experiences over longer time spans), which might play a crucial role in shaping intergroup experiences (e.g., MacInnis & Page-Gould, 2015; Schäfer, Simsek et al., 2021). Furthermore, research on when an asymmetry of intergroup contact effects might occur has brought up some interesting early lines of explanation, which (re-)connect intergroup contact research with other fields of psychological research (e.g., on intergroup interactions and on basic psychological processes; Graf & Paolini, 2017; Paolini & McIntyre, 2018).

However, this emerging research has not yet yielded definite results. Some findings suggest that negative contact has stronger effects than positive contact, others suggest the opposite. While research is making progress in identifying first meaningful moderators that explain when these relations emerge, we need more research to address the question of whether or in which conditions a positive–negative valence asymmetry emerges. Nevertheless, as for example already highlighted in the early works addressing positive as well as negative intergroup contact (e.g., Barlow et al., 2012), a potential asymmetry of valenced contact effects might have high applied relevance, as it suggests that more opportunities for intergroup contact due to an increase in ethnic and cultural diversity does not always result in less—or might even increase—intergroup conflicts.

Despite the growing number of studies addressing negative intergroup contact, it is not fully clear what exactly constitutes negative contact for research participants in this work, as qualitative research on lay understanding of positive and negative contact is still scare, as we will argue in the next section. In order to provide a good starting point for interventions addressing intergroup contact, researchers and practitioners alike need to further understand the complexities and nuances of valenced intergroup contact. We therefore continue by broadening the perspective from the researchers' use and understanding of negative contact to a lay perspective, and ask the question: What kind of negative contact experiences are referred to by lay individuals when negative contact is studied, and where does this contact happen?

WHAT KINDS OF EXPERIENCES CONSTITUTE NEGATIVE CONTACT IN EVERYDAY LIFE?

The relevance of such a shared understanding of intergroup contact is highlighted by previous qualitative research, which did not focus on valenced but on intergroup contact in general. Keil

and Koschate (2020, Study 1), for example, demonstrated that participants vary in their subjective definition of what intergroup contact is. Participants in this research first completed a 3-day diary task, in which participants were asked to report their intergroup contacts in as much detail as possible, and subsequently participated in semi-structured interviews on the respective contact experiences. The results of these interviews demonstrate that participants differ in their understanding of whether, for example, mutual acknowledgement is sufficient to constitute intergroup contact, or whether it might need more meaningful conversations than a simple greeting. Thus, a shared understanding of our measures of intergroup contact is not necessarily given and a qualitative understanding of lay interpretations of intergroup contact is important not only to foster a valid interpretation of participants' answers to our questionnaires: Additionally "when communicating with stakeholders such as community leaders, charities, or institutions (e.g. schools) about interventions to reduce prejudice, a shared understanding is essential for a successful implementation" (Keil & Koschate, 2020, p. 2).

While this research provided interesting findings on the variety of intergroup contact experiences, it did not explicitly focus on the question of which situations would be perceived as positive or negative. Relatedly, the critique has been raised that to date we do not yet understand enough about the complexity of negative intergroup contact specifically. McKeown and Dixon (2017) point out, it is not "… valid to presuppose that positive and negative contact are merely opposing poles of a simple, unidimensional continuum …" and also call for more qualitative research to develop a more detailed understanding of intergroup contact situations.

Follwing this call, we conducted a 13-day diary study in ethnically mixed areas in Great Britain among 780 British White and 605 British Asian individuals (Schäfer, 2020). During each day of this period, participants who reported having any valenced contact were additionally asked to note a few keywords to describe the contact experience. Participants provided open-ended responses for 3601 positive and 531 negative intergroup contact experiences—which is in line with previously mentioned findings that positive contact is more frequent than negative contact. In a bottom-up approach of a qualitative content analysis (Mayring, 2010), coders categorized these descriptions in progressively more abstract categories. Each statement was coded by at least two of three coders; if in doubt, the first author as well as all three coders reached agreement by means of group discussions. A single diary statement could end up in multiple categories. From this procedure, two basic dimensions emerged: one representing where the contact happened (Table 1) and the other specifying the kind of positive (Table 2) and negative (Table 3) intergroup contact. As shown in Table 1, positive as well as negative contact for both majority and minority members mostly occurred while going shopping and eating out, at work, and in public (e.g., in parks or on the bus).

With regard to different kinds of intergroup contact, in our qualitative data set, positive intergroup contact was most frequently categorized as small talk, including brief greetings, followed by deeper conversations like catching up with a friend and receiving support and help. For negative contact, the most frequent category was experiencing threats, such as being called names (Stephan et al., 2002). The second most frequent type of negative contact was conflictual conversations, followed by instances of unreciprocated communication, where, for example, neighbors did not return greetings, which thus represents the feeling of being avoided.

Furthermore, we wanted to highlight contact that fell into the category of "observed negative contact." This contact occurred even though participants in this study were explicitly instructed to report direct contact. Additionally, due to a dynamic filter, participants were only asked the qualitative question to qualify their negative contact if they had reported having at least some direct contact on a quantitative measure of negative contact frequency. This kind of misreporting

Table 1 Incidence rate of different places for positive and negative contact reported by majority (White) and minority (Asian) participants

Places for intergroup contact	Positive		Negative	
	White participants	Asian participants	White participants	Asian participants
Public institutions	68 (5.7%)	28 (4.8%)	2 (2.1%)	0
Children related (e.g., via schools, playgrounds…)	59 (5%)	31 (5.3%)	3 (3.2%)	1 (1.5%)
Public places (e.g., in parks, on the bus…)	162 (13.8%)	82 (13.9%)	36 (38.3%)	22 (32.8%)
At home/with family	14 (1.2%)	12 (2%)	6 (6.4%)	0
Work	356 (30.2%)	212 (36.1%)	23 (24.5%)	27 (40.3%)
Hobbies	54 (4.6%)	21 (3.6%)	0	0
Shopping and eating out	464 (39.4%)	202 (34.4%)	26 (27.7%)	17 (25.4%)
Total of all categories mentioned	1177	588	94	67

Note: Single statements on contact situations might be included in more than one category.

Table 2 Incidence rate of different kinds of positive contact reported by majority (White) and minority (Asian) participants

Different kinds of Positive Contact	White Participants	Asian Participants
Conversations	238 (34.2%)	91 (18.1%)
Nonverbal communication	73 (10.5%)	30 (6.0%)
Small talk	475 (68.3%)	310 (61.6%)
Received help	115 (16.5%)	58 (11.5%)
Granted help	32 (4.6%)	14 (2.8%)
Total of all categories mentioned	695	503

Note: Single statements on contact situations might be included in more than one category.

(i.e., naming indirect instead of direct contact) did not happen in the realm of positive contact, where participants did not report any indirect contact.

This finding might be due to the low overall levels of reported negative contact, which might have led participants to fill in anything related to the topic. Yet, it might also hint to another explanation: Even indirect negative contact might be experienced as relevant, suggesting that even low intense negative events, such as observing negative intergroup contact, are interpreted as a negative experience for the individual. The pattern that, in the realm of negative intergroup contact, more experiences of a lower intensity are reported than in the realm of positive contact, can also be found in previous research. Hayward et al. (2017), who assessed the frequency of 69 positive and negative intergroup contact experiences as well as their intensity, found that surprisingly, overall positive contact experiences yielded a higher intensity than negative ones.

To sum up, in line with Keil and Koschate (2020), our findings demonstrate that there is not one simple understanding of negative contact and that participants indeed experience a wide variety of different contact experiences, which vary on more than their valence.

The descriptive findings from our qualitative data furthermore illustrate that negative and positive intergroup contact, for majority as well as minority members, mostly occur at work or in

Table 3 Incidence rate of different kinds of negative contact reported by majority (White) and minority (Asian) participants

Type of Negative Contact	White Participants	Asian Participants
Conversations	24 (21.1%)	14 (24.1%)
Unreciprocated communication	5 (4.4%)	7 (12.1%)
Denied help	5 (4.4%)	4 (6.9%)
Observed negative contact	7 (6.1%)	3 (5.2%)
Being verbally threatened or insulted	73 (64.0%)	30 (51.7%)
Physical harm (e.g., being pushed in the shopping line)	3 (2.6%)	1 (1.7%)
Total of all categories mentioned	114	58

Note: Single statements on contact situations might be included in more than one category.

public and unstructured settings (see also Dixon et al., 2020; Pettigrew & Tropp, 2011; compare also Graf et al., 2018). Based on this particular finding and in line with previous research, which addresses intergroup contact at work (e.g., Laurence et al., 2018), we consider it important for employers and society alike to continue to address diversity at the workplace—with its opportunities not only for negative, but also for positive intergroup experiences.

The importance of public places has been previously highlighted by Dixon et al. (2020, Study 1; see also Dixon & Durrheim, 2003), who, using GPS tracking data from Protestants and Catholics in north Belfast, demonstrated that while individuals mostly keep their daily routines in religiously homogeneous areas of the city, some individuals also visit places shared by both groups, such as shopping malls and industrial areas. Yet, to the best of our knowledge, shaping intergroup contact in public spaces (e.g., while shopping and eating out) has not been explicitly examined in research to date (for more data on frequencies of intergroup contact in public spaces and formal settings see Graf et al., 2018). Interventions addressing these public spaces might be necessary to shape intergroup contact experiences and might additionally help to reach individuals outside of more established and structured settings for interventions such as schools or workplaces. Such interventions could, for example, include the design of public spaces with an awareness of diversity, which creates space for affirming sameness across groups, but also to encounter differences (e.g., Day, 2003). On a more concrete level, our data suggest that, for example, food stores and restaurants might be good places for neighborhood interventions. While these highly unstructured settings pose many challenges for practitioners and researchers alike, our findings suggest that they are highly relevant in individuals' everyday intergroup contact.

The challenge in addressing intergroup contact in public and unstructured settings is closely related to a further insight from our data. Across all the different places in which participants of our diary study experienced positive and negative intergroup contact, it has to be stated that many of the kinds of experiences represented are rather casual instances of intergroup contact. For intergroup contact research, this is an important finding, as much research on intergroup contact focuses on more intimate forms of intergroup contact, such as intergroup friendship, and indeed, these more intimate forms tend to yield stronger effects decreasing prejudice (Davies et al., 2011; Marinucci et al., 2020). Furthermore, superficial negative contact might have stronger effects than negative contact in more intimate relationships (e.g., Graf et al., 2018). Thus, from both perspectives—positive as well as negative contact—it seems worthwhile fostering opportunities for intimate intergroup contact.

Overall, answering the call by Keil and Koschate (2020) and Dixon et al. (2005) to use qualitative data to shed more light on positive as well as negative intergroup contact experiences in individuals' everyday lives, demonstrates that both positive and negative contact occur mostly at work and in public places (see also Pettigrew & Tropp, 2011) and often are only rather casual experiences. Importantly, in our data, participants report much more positive than negative instances of intergroup contact. As we will highlight below, the higher frequency of positive compared to negative intergroup contact is one crucial factor when evaluating the consequences of negative intergroup contact for intergroup relations (e.g., Graf & Paolini, 2017; Pettigrew & Tropp, 2011) and might help to dispel doubts regarding whether negative intergroup contact could be an argument against bringing groups together.

POSITIVE CONTACT IS MORE FREQUENT THAN NEGATIVE CONTACT

As mentioned before, previous research has argued that potential stronger effects of negative intergroup contact might be compensated for by a higher prevalence of positive intergroup contact (Graf & Paolini, 2017). Indeed, the prediction that positive contact is more frequent than negative contact seems plausible as, overall, in social environments, positive information is more frequent than negative information (Baumeister et al., 2001; Unkelbach et al., 2019; 2020).

Furthermore, in the field of intergroup contact, there is first evidence that positive intergroup contact is more frequent than negative intergroup contact. Graf and colleagues (2014) found, based on intergroup contact descriptions from participants of five European countries, three times more positive than negative instances of intergroup contact (for comparable results, see Pettigrew & Tropp, 2011). Reviewing the literature on positive and negative intergroup contact to date, we can state that this finding holds in various settings; for example, towards a range of outgroups like Black Americans (Hayward et al., 2017, Study 1), overweight people (Alperin et al., 2014), Igbo people in Nigeria (Adesokan, 2014), and foreigners in Germany (Van Assche et al., 2018). Our own research (Schäfer, Dornschneider, et al., 2021) shows that positive contact is more frequent than negative contact even in settings where there is high conflict between two groups (see also Husnu & Paolini, 2018; Paolini et al., 2014, Experiment 3): in diverse Israeli neighborhoods, Jewish and Arab-Israeli participants were interviewed using a quantitative telephone survey about the frequency of subjectively positive and negative intergroup contact in their neighborhood. Jews reported more positive direct contact than negative direct contact, as did Palestinian participants.

The higher frequency of positive contact experiences also appears to hold true for minority groups and groups of lower societal status (e.g., Graf et al., 2014; Hayward et al., 2017, Study 2; Reimer et al., 2017) and even holds within vulnerable groups (e.g., highly discriminated-against groups): In additional and recent research from our laboratory, even highly vulnerable groups like Syrian refugees in Germany ($N = 150$, who were staying in Germany for $M = 11.43$ months, SD = 6.99) reported more positive than negative contact experiences with Germans (Schäfer, 2019). A similar pattern was also found in a more diverse sample of refugees in Germany (N = 176; 31.3% from Syria; 26.7% from Afghanistan; 13.6% from Iraq), where, again, refugees reported significantly more positive than negative outgroup contact with Germans (Schäfer & Piecha, 2019).

To the best of our knowledge, there are only two samples in which participants reported more negative than positive contact with outgroup members. One sample consists of Flemish police officers reporting contact with immigrants with non-European roots (Dhont et al., 2010), with police contact being a field where it appears that find many negative interactions is rather likely.

The other sample consists of Bulgarian majority group members reporting intergroup contact with Roma, who constitute a highly stigmatized group, especially in eastern European countries (Visintin et al., 2017).

In a recent meta-analysis, Paolini et al. (2021) took data from individual studies, which measured the reported frequency of both negative and positive contact. Paolini and colleagues computed the relative prevalence of positive (vs. negative) contact for each given sample. The authors found that across the synthesized studies there was a significant positive valence asymmetry in prevalence—that is, positive contact was more frequent than negative contact. Importantly, the magnitude of this effect was heterogeneous across studies. Put differently, while the asymmetry of frequency is likely to be relatively ubiquitous and robust, it still varies across settings and samples. Hence, the meta-analysis suggests that prevalence asymmetries are context-sensitive and vary between studies.

This finding is also backed up by the result that, in many samples, positive and negative intergroup contact frequency were only mildly correlated (e.g., Barlow et al., 2012; Hayward et al., 2017, Study 2; Schäfer, Kros et al., 2021, Study 1; Techakesari et al., 2015, Study 1). In several samples there is even no significant correlation between positive and negative contact at all (e.g., Aberson, 2015; Hayward et al., 2017; Study 1; Reimer et al., 2017, Study 1b; Techakesari et al., 2015, Study 2 and Study 3). This suggests that it might be possible to identify factors that increase positive contact without increasing negative contact, or decrease negative contact without hindering positive intergroup experiences.

Yet, while research provides the first pathways to increasing positive intergroup contact (i.e., self-expansion motives, confidence in contact, and societal norms, Kauff et al., 2020), as pointed out above, an increase in positive contact does not necessarily also result in a decrease in negative intergroup contact. As research regarding predictors of negative contact is still in its infancy, we only provide a short overview of research addressing this question. So far, researchers have aimed to examine predictors on the individual level (e.g., right-wing authoritarianism and personality traits, Prati et al., 2021), on the group level (e.g., majority or minority status, Árnadottìr et al., 2018; Hayward et al., 2017; Wang et al., 2020; social norms, Prati et al., 2021), and on the contextual level (e.g., macro-diversity, Kros & Hewstone, 2021; Van Assche et al., 2018; number of owners in a media market, Paolini et al., 2021). Many of these suggested predictors still rely on single studies or multiple studies, which yield opposing results. Thus, more research is needed on which factors might affect the frequency of negative (and possibly also positive) intergroup contact.

Overall, there is converging evidence that positive intergroup contact experiences are more frequent than negative ones. Yet, we want to highlight one further consequence of our findings for research and applied settings alike: In most of the survey studies reported above, many individuals do not report having any direct negative intergroup contact at all.[1] This lack of negative contact might be systematic. Participants reporting negative contact might, for example, be more open to contact in general, might voluntarily or involuntarily live in mixed areas, or might even be more prone to engage in negative interactions with others. These factors in turn could possibly not only

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[1] For example, in our own research of a representative sample in mixed neighborhoods in Great Britain, which included majority and minority (Asian British) participants ($N = 3012$; Schäfer, Kros et al., 2021, Study 1), about 48% of the participants reported to never having had any negative contact experience, and an additional 35% of participants reported having negative contact "a few times a year or less." On the contrary, only 1.5% reported having negative contact "every day" and 2.4% "several times a week." Thus, when trying to estimate the impact of negative intergroup contact in comparison to positive intergroup contact we have to be very careful, as overall the percentage of people who have any negative direct intergroup contact experiences at all is low, while almost everyone reports at least some direct positive contact (e.g., in our sample: 98.1%, with 76% reporting positive contact "several times a week" or more).

affect the frequency of contact itself, but also how people process intergroup contact. In other words, when generalizing effects of negative contact experienced by that subgroup that has negative contact to the rest of the population, we must remember this subgroup might be systematically different from individuals without any contact or only positive contact experiences. To address this issue, further experimental research on negative (compared to positive contact) is needed and future research should explicitly address groups in society that have no intergroup contact. Further more, as previous research reported above suggests (e.g., Paolini et al., 2014; Schäfer, Simsek et al., 2021) that previous intergroup experiences shape subsequent ones, this consideration is also important for applied projects.

To summarize, recent warnings that negative intergroup contact could curb the positive effects of positive intergroup contact (e.g., Barlow et al., 2012) should consider the higher prevalence of positive intergroup contact effects, as for example suggested by Graf and Paolini (2017). The reported research shows that the higher prevalence of positive compared to negative intergroup contact holds true in many different intergroup settings—even in settings in which one would expect tense intergroup relations (e.g., mixed neighborhoods in Israel or among refugees in Germany). Furthermore, in their everyday lives, many individuals do not experience any direct negative contact, but do have some positive intergroup contact—and any concerns regarding the consequences of negative contact might, therefore, not be relevant for large sections of the respective populations.

IMPLICATIONS AND CONCLUSIONS

The established field of research on positive intergroup contact was recently roused by the call for a careful examination into whether negative intergroup contact experiences might be a crucial caveat for attempts to improve intergroup relations by fostering positive intergroup contact (Barlow et al., 2012; Paolini et al., 2010). The current article has updated earlier reviews (e.g., Graf & Paolini, 2017) on the research following this wake-up call.

We examined the current evidence regarding a potentially stronger effect of negative compared to positive intergroup contact, finding that, to date, evidence does not yield a clear conclusion on this question, and we reported on the discussion on factors that might influence this asymmetry (e.g., Barlow et al., 2019; Paolini et al., 2014; Schäfer, Simsek et al., 2021). Furthermore, we answered the call for more qualitative research examining positive as well as negative intergroup contact, finding that it is important to increase research on casual intergroup contact in unstructured settings (Dixon et al., 2020) and at work. We lastly provided an up-to-date review of the relative frequency of negative and positive intergroup contact and thereby demonstrated in line with previous research (Graf et al., 2014), that the larger frequency of positive compared to negative intergroup contact holds true in many settings.

Having the applied perspective in mind, we first want to state that negative contact certainly has detrimental and sometimes even stronger effects than positive intergroup contact. And yes, if negative contact occurs, these effects might thus indeed be highly relevant for applied settings, for example having the potential to spoil the positive effects of intergroup contact interventions (e.g., Guffler & Wagner, 2017).

However, even though first research suggests that, for example, individuals' expectations (e.g., Zingora et al., 2020) and previous experiences (e.g., Paolini et al., 2014; Schäfer, Simsek et al., 2021) could influence the effects of positive compared to negative contact, not much is known about in which situations and contexts and for which individuals a *positive–negative asymmetry of*

intergroup contact effects occurs. For practitioners, these first findings suggest that it is indeed sensible to keep in mind that negative contact might occur if we bring individuals of different societal groups together. Yet, this field of research is just in its very beginnings. While this first research opens up many interesting and important questions, we call for more research to increase insights on how the influence of negative intergroup contact on intergroup relations might be reduced. Also, Paolini, Barlow, Graf and their collaborators clearly pointed out in their original analyses of valence asymmetries that this acknowledgment of potential detrimental effects of negative contact is not to be misunderstood as a call to reduce diversity and opportunities for intergroup contact, rather it is an invitation to closely consider the complexities of contact in unstructured settings and the need to ensure positive contact is always facilitated (see Barlow et al., 2012, p. 1640; Graf & Paolini, 2017, p. 98; Paolini et al., 2010, p. 1735).

It is therefore important to note that first research suggests that diversity increases positive intergroup contact while it does not necessarily increase negative contact (e.g., Kros & Hewstone, 2021; but see Van Assche et al., 2018), thus an increase might first and foremost lead to positive intergroup contact for many people. However, more evidence is needed to back up this claim. An increase in positive contact would additionally be helpful in establishing a positive intergroup climate, which in turn additionally improves intergroup relations over and above the mere individual positive encounters (Christ et al., 2014). Still, it is of course important to go beyond a mere increase in diversity: As Kauff et al. (2020) demonstrate, self-expansion motives, confidence in contact and societal norms can further increase positive intergroup contact.

Even though we deem it necessary to increase positive contact overall, our qualitative data demonstrate that, if intergroup contact occurs, it is often in the form of casual interactions in unstructured settings. Previous research suggests that, in particular, more intimate forms of cooperation, like intergroup friendship (Davies et al., 2011; Marinucci et al., 2020), yield strong positive effects for intergroup relations and that casual forms of negative contact might be more powerful than more negative contact in more intimate relationships (e.g., Graf et al., 2018). We therefore propose that it is still a necessary measure to go beyond the mere increase in intergroup contact opportunities per se, and to encourage opportunities for intimate forms of intergroup contact. The same call holds true for working environments: Individuals in our qualitative data set reported many intergroup contact experiences at work—and while we appreciate the concerted attempts by many businesses to increase diversity, we also want to point out that the structured nature of the work setting would also allow measures to go over and above the mere increase in diversity and could build structures to actively foster positive intergroup cooperation.

Nevertheless, besides thinking about measures to increase positive and particularly intimate forms of positive contact, practitioners and researchers alike should also keep reducing negative contact in mind. To date, with regard to this concern, it is encouraging to find the heterogeneity in the prevalence of positive and negative intergroup contact. Practitioners and researchers alike should not forget that this demonstrates that there is a chance to, on the one hand increase positive and committed forms of positive intergroup contact, and on the other to decrease negative intergroup contact. To date we only find first attempts to identify correlates of negative contact on different levels (e.g., majority or minority status, Árnadottìr et al., 2018; diversity, Kros & Hewstone, 2021; Van Assche et al., 2018). Thus, to provide pathways to further reduce the frequency of negative contact in applied settings, especially in the workplace and public places, more research is needed. Furthermore, future research should also consider indirect forms of negative intergroup contact, such as negative intergroup experiences reported in the media, as they might have crucial effects on intergroup relations, as well as intergroup contact (Mazziotta et al., 2015; for a broader discussion, see White et al., 2020).

Last but not least, we want to highlight the finding from our review regarding the prevalence of positive compared to negative intergroup contact. Even in rather conflictual settings like in mixed neighborhoods in Israel or for refugees in Germany, the proposed basic principle structuring social environments (e.g., Unkelbach et al., 2019) held true: Positive intergroup experiences are much more frequent than negative intergroup experiences. Of course, we should not completely forget about the settings where these findings did not apply: The psychological consequences of police officers, who are bound to have a lot of negative experiences (Dhont et al., 2010) and for minorities of such a low status that it seems "normal" for them to have negative experiences (Visintin et al., 2017) should be a major concern of democratic societies. Indeed, in situations of social status differences, negative contact might also have beneficial effects of increasing majorities' willingness to engage in collective action (e.g., Hässler et al., 2020; Reimer et al., 2017). Yet overall, we should not forget the rather low levels of negative intergroup contact, and fear of potential side effects should not hinder the important attempts to bring together individuals of different groups and to encourage cross-group ties to build a cooperative foundation for today's diverse societies.

We want to conclude with a clear answer to the most pressing question that might arise for practitioners and researchers alike in the realm of negative intergroup contact, namely: Given all these insights into the consequences of negative intergroup contact, is it still sensible to bring members of different groups into contact? We would suggest that the answer is a clear "Yes"—in most settings and for most individuals. We emphasize the importance of fostering positive intergroup contact, especially under favorable conditions. The emerging research on joint effects of positive and negative intergroup contact has raised many important research questions with strong relevance for applied settings. But while we believe it is of great importance to acknowledge that when members of different groups meet, not only positive, but also negative intergroup contact occur, to date the evidence does not yield to the conclusion that avoiding negative contact could justify avoiding intergroup contact overall.

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