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ORIGINAL ARTICLE

Beyond direct contact: The theoretical and societal relevance of indirect contact for improving intergroup relations

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Abstract

Today, physical and psychological barriers can reduce opportunities for the type of direct face-to-face intergroup contact first identified by Gordon Allport. Consequently, social psychological researchers have identified, developed and tested a burgeoning array of different forms of indirect contact, including, extended contact, Electronic or E-contact, imagined contact, vicarious contact and parasocial contact. In addition to providing a critical review of each of these forms, we argue that indirect contact is more than just a simple “replacement” for direct contact, but instead has the potential to improve intergroup relations for *both* minority and majority members in its own right. Relatedly, we acknowledge that indirect contact occurs within specific normative contexts embodied in legislation, institutions, and media and political contents. In fact, we recognize that indirect contact requires an integrative understanding of the role of intergroup norms and affective processes in order to effectively achieve public policy objectives to optimize effects on prejudice reduction.

In today's society, face-to-face contact between ingroup and outgroup members is often impractical, especially in segregated contexts (e.g., religiously segregated schools or neighborhood separation), when the ratio of groups is unbalanced (e.g., ethnic minorities or people with a disability), when the outgroup is invisible (e.g., sexual minorities or people with a mental illness), or when the normative context does not allow for intergroup interactions (e.g., refugee camps or segregated societies). Additionally, direct outgroup contact may be too threatening and/or anxiety-provoking for some individuals (Allport, 1954). These physical and psychological barriers can reduce opportunities for the type of direct intergroup contact first identified by Allport. Consequently, social psychological researchers have identified, developed and tested a burgeoning array of different forms of indirect contact, for example, extended contact, Electronic or E-contact, and imagined contact. Importantly and of particular interest to public policy domains, indirect contact does not require face-to-face contact to promote intergroup harmony.

Beyond justifying the need for indirect contact, we expand this narrative by arguing that indirect contact achieves more than simply overcoming the limitations of direct contact, as is commonly assumed. Instead, we posit that the different forms of indirect contact are not a simple "replacement" for direct contact, but on the contrary, they have the potential to improve intergroup relations for both minority and majority members in their own right, much more than previously thought. Furthermore, it is argued that understanding indirect contact offers new insights into the underlying psychological processes beyond individual interpersonal interaction that may also inform and support direct contact experiences in the future (Paolini et al., 2021). Indirect contact theory and research examines pathways to attitude and behavior change through social processes connected to (1) social learning where new information is acquired that changes perceptions of the outgroup and nature of intergroup relations; (2) communication and clarification of group-based norms and associated social influence processes; and (3) recategorization processes where outgroup members are included as similar to the self and as part of a shared ingroup (e.g., student membership or the same school or setting).

In making the case for the importance of indirect contact *beyond* direct contact, it is necessary to acknowledge that indirect contact does not occur in a vacuum, but instead occurs within specific normative contexts embodied in legislation, institutions, and media and political interests. The different forms of indirect contact critically reviewed here include extended contact (Wright et al., 1997), imagined contact (Crisp & Turner, 2009), and vicarious contact (Gómez & Huici, 2008). We also evaluate new and emerging forms of indirect contact such as parasocial contact (Schiappa et al., 2005), and indirect contact interventions such as E-contact (White & Abu-Rayya, 2012; White et al., 2020).

We emphasize to researchers, educators, and policy makers alike, that indirect contact is a promising tool for prejudice-reduction in natural settings, including the school environment and workplaces, because it can be implemented in homogeneous, segregated, or conflicted contexts where direct, face-to-face contact is either difficult or impossible to orchestrate. Most importantly, indirect contact can have an impact *en masse* rather than individual-to-individual through direct contact offering more effective and efficient pathways to intergroup harmony. Finally, we propose how indirect contact (at times in combination with direct contact) can assist in achieving public policy goals to maximize effects on prejudice reduction. We achieve this while acknowledging that indirect contact requires an integrative understanding of the role of intergroup norms and affective processes.

EXISTING AND EMERGING FORMS OF INDIRECT CONTACT

We argue that existing and emerging forms of indirect contact have common and differentiating characteristics. This acknowledgment is important in order to understand (i) their similarities and differences with respect to their underlying processes and (ii) how these forms of indirect contact can be integrated and/or combined with direct contact in order to maximize prejudice reduction. In doing so, we critically evaluate each strategy with regards to its applications to real-world contexts.

Extended contact refers to knowing about ingroup members who have outgroup friends (Di Bernardo et al., 2017; Dovidio et al., 2011; Vezzali et al., 2014; Wright et al., 1997). Extended contact has generally been tested in correlational or longitudinal studies (Eller et al., 2012), while experimental studies are rarer (for exceptions, see e.g., Gómez et al., 2018; Wright et al., 1997). In addition to reviews supporting its effectiveness (Brown & Paterson, 2016; Vezzali et al., 2014), there is now meta-analytic evidence showing the benefits of extended contact for improving intergroup relations (Zhou et al., 2019). Although there is considerable support for extended contact, two shortcomings should be acknowledged. First, even though extended contact does not require groups to meet physically for prejudice reduction to occur, its effectiveness still relies on the existence of direct contact. In many contexts of segregation and conflict, opportunities for positive intergroup contact simply do not exist in people's broader social networks (e.g., in culturally homogenous contexts). Relatedly, extended contact appears to be effective via proximal contacts that are central to individuals' social networks (e.g., friends or family) rather than transferring to distal contacts (e.g., neighbors or work colleagues; Boin et al., 2021; Tausch et al., 2011). Second, as noted by Brown and Paterson (2016), the extended contact hypothesis does not lend itself readily to a viable prejudice reduction intervention. It may often be the case that no outgroup friends exist in one's social network, and in very few circumstances will it be feasible for known ingroup members to forge an outgroup friendship.

Another form of indirect contact that has proven to be successful in reducing prejudice is *vicarious contact*, consisting in the observation of an interaction between ingroup and outgroup members (Brown & Paterson, 2016; Dovidio et al., 2011; Vezzali et al., 2014; Wright et al., 1997). Vicarious contact typically is operationalized by asking participants to watch an ad hoc created video depicting a positive intergroup interaction (Gómez & Huici, 2008; Mazziotta et al., 2011) or, in interventions conducted in naturalistic contexts, by reading short stories about such interactions (Cameron & Rutland, 2006). Vicarious contact can also occur via the media, for instance by watching television (Joyce & Harwood, 2014), listening to the radio (Paluck, 2009), or reading books (Vezzali et al., 2015). Although vicarious contact has the potential for widespread dissemination, not every portrayal of cross-group contact in the media is positive or even neutral. News stories of intergroup atrocities or conflict between individuals (e.g., shooting death of Tamir Rice in Cleveland, Ohio, USA in 2014) and groups (e.g., Easter Sunday bombings in Colombo, Sri Lanka in 2019) have the potential to increase viewers' prejudice, especially amongst those who highly identify with the ingroup (Joyce & Harwood, 2014).

A related form of indirect contact involves parasocial or media contact (see Park, 2012; Schiappa et al., 2005). The parasocial contact hypothesis combines media and intergroup contact research by proposing that observing positively portrayed outgroup characters is akin to direct face-to-face intergroup contact (Schiappa et al., 2005). Parasocial contact is conceptually similar to vicarious contact via the media, with one important difference. Although vicarious contact follows contact principles requiring that ingroup and outgroup members interact, parasocial contact also includes simple exposure to the outgroup via the media (i.e., media representations of outgroup

individuals). Nonetheless, research has shown that parasocial contact can reduce prejudice toward the outgroup (Schiappa et al., 2005; Wojcieszak & Azrout, 2016). However, as in the case of vicarious contact, parasocial contact may lead, depending on the positive or negative portrayal of the outgroup, to either an increase or decrease in prejudice (Graves, 1999; Mutz & Goldman, 2010). The actual content of mass-mediated communication and the nature of the outgroup image portrayed determine the direction of the shift in prejudice levels. Moreover, research on the underlying process of media contact on outgroup attitudes is not yet conclusive, thus indicating the need for more research in this area (Mutz & Goldman, 2010).

Another form of indirect contact that has gained relevance over the past years is *imagined contact*, consisting in the mental simulation of a (positive) interaction between the self and an imagined outgroup partner (Crisp & Turner, 2009, 2012). Meta-analytic research has shown that imagined contact is an impactful indirect contact strategy for a broad array of target outgroups and contexts (Miles & Crisp, 2014). Although imagined contact has been the target of skepticism related to its applicability to real-world scenarios (Bigler & Hughes, 2010; Lee & Jussim, 2010), research has demonstrated its effectiveness against harsh forms of discrimination (Vezzali et al., 2020), in conflictual (Bagci et al., 2019) and high-prejudiced contexts (West et al., 2015), and longitudinally (Vezzali et al., 2012).

A new form of indirect contact is Electronic- or E-contact. E-contact allows ingroup and outgroup members to meet in a goal-orientated and cooperative online interaction, typically in a synchronous and text-based chat room (White, Harvey, & Abu-Rayaa, 2015; White et al., 2020). During the online interaction, both ingroup and outgroup voices are communicated to one another (White, Harvey, & Verrelli, 2015). E-contact is gaining popularity because of the greater importance that computer-mediated technologies have in everyday life (O'Donnell et al., 2021). Unlike previous computer mediated approaches to promote communication (Amichai-Hamburger & McKenna, 2006; Walther, 1996), E-contact is a structured intervention that accommodates Allport's optimal contact conditions; for example, equal status is operationalized by carefully matching the participants and outgroup members on age, gender, and education level; cooperation and the common goal involve participants working together to find the solution to a shared problem; and authority support is operationalized by either a parent, a teacher or the chat moderator supporting participation during the intervention (White et al., 2020).

The original text-based E-contact intervention involved real intergroup Internet interactions between Muslim and Catholic students in segregated schools in Australia (White & Abu-Rayya, 2012; White, Abu-Rayya, et al., 2015; White et al., 2014). More recently, a new shorter version of E-contact involving a preprogrammed outgroup member has been developed and tested, and has been found to successfully improve intergroup relations across multiple contexts involving: (i) Catholics and Protestants in Northern Ireland (White, Turner, et al., 2019); (ii) bias reduction against sexual minority men and women (White, Verrelli, et al., 2019); (iii) stigma reduction against people with schizophrenia (Maunder et al., 2019); and (iv) prejudice reduction against transgender individuals (Boccanfuso et al., in press). Reliance on technologies, such as the Internet, can help reduce psychological barriers (i.e., outgroup anxiety and avoidance), because having to approach the outgroup directly is not necessary (Kauff et al., 2021; O'Donnell et al., 2021; White et al., 2020), and overcome physical barriers of space and time, making contact available globally. As acknowledged by Dovidio et al. (2017), "The Internet might be particularly well suited for optimal contact, because it creates a protected and controlled environment, and allows scheduling multiple contact experiences across time" (p. 609). Due to its reliance on the Internet, however, one potential limitation of the E-contact intervention to reduce prejudice is that individuals require full Internet access, which may limit the applicability of the intervention (e.g., in contexts of socioeconomic disadvantage).

Table 1 Forms of indirect of contact differentiated across two orthogonal dimensions: activity/passivity, and medium of indirect contact

	Contact through another person that has contact	Contact through a medium	Contact through the self
Active interaction	Extended contact	E-contact	Imagined contact
Passive interaction	Extended contact	Vicarious contact Parasocial contact/Media contact	Imagined contact

These forms of indirect contact should not be understood in isolation, but rather can be included in a unitary conceptual framework. In Table 1, we identify two orthogonal dimensions that allow us to better understand the different forms of indirect contact. One dimension concerns the medium through which indirect contact occurs. In fact, although face-to-face contact implies a direct interaction with the outgroup member, indirect contact can occur via another person (generally, an ingroup member), a medium (the Internet, but also mass media) or the self. The second dimension refers to whether indirect contact implies an active interaction for the individual, or whether instead it occurs passively. From the intersection of these two dimensions, we identify six cells. Extended contact can be placed in the cell where indirect contact occurs through another person and the interaction is active. This is the case when an individual speaks with an ingroup member about his or her intergroup experiences. However, extended contact can also occur passively; for instance, when an individual hears ingroup members telling others about their experiences with the outgroup. This distinction between active and passive extended contact opens the door to future examinations that distinguish between the different forms that extended contact can take. It is possible that they are characterized by different underlying processes. For example, simply listening to ingroup members discussing their cross-group experiences (passive extended contact) might be associated with increased membership salience (cf. Wright et al., 1997) and as a consequence, greater chances for generalization of outgroup attitudes. In contrast, active extended contact may provide individuals with the chance of discussing the cross-group interaction with the ingroup friend more in depth, with a greater chance to lower one's anxiety, and therefore to improve outgroup attitudes mainly via reduced intergroup anxiety.

E-contact is in the cell where contact occurs through a medium (in this case the Internet) and the interaction is active and synchronous. In fact, in E-contact, the individual can text-chat in real-time with an outgroup member through a screen, which allows to overcome physical barriers, such as the distance between the two. When contact occurs through a medium and the interaction is passive, we find vicarious contact. It is the case of individuals who watch a video or read a story about intergroup contact. When these videos or stories are reported in mass media, the cell is shared with parasocial/media contact, which is precisely concerned with interactions via the media. However, viewers must form an emotional bond with the outgroup in order for it to be considered as parasocial contact. Thus, mere exposure to the outgroup without any involvement with the media content does not constitute parasocial contact.

Finally, indirect contact can also occur through the self. This is the case of imagined contact, which generally is an active strategy (i.e., mental stimulation), because the individual has to be active in simulating an intergroup experience. But imagined contact can also be passive when it occurs spontaneously (Stathi, Guerra, et al., 2020), for instance when automatically rehearsing a

past interaction or thinking about future contact (where some degree of mental elaboration, even if outside awareness, is likely to be present). The success of all these forms of indirect contact may also depend on the existence or creation of “normative” climates where intergroup tolerance is considered “right” and “appropriate” and therefore, is authority sanctioned.

Whilst the primary focus of this review concerns the positive impact of indirect contact, it is important also to acknowledge that there is some emerging evidence showing that negative forms of extended contact (Mazziotta et al., 2015), and vicarious and parasocial contact (Schemer & Meltzer, 2020) have worsened intergroup attitudes. In their correlational study, Mazziotta et al. (2015) concluded that observing more negative cross-group interactions has the potential to both (i) increase the chances of also experiencing negative cross-group interactions and (ii) undermine the chances of forming positive cross-group relations. Similarly, in their experimental study, Schemer and Meltzer (2020) found that negative parasocial and vicarious contact with refugees increased prejudice toward refugees; however, because they did not measure positive contact, confident conclusions about the differential effects of the positive versus negative media portrayals of outgroups cannot be made. Experimental designs that include both positive and negative indirect contact conditions are needed to shed light on the true consequences for intergroup relations. This is especially true when considering that the relation between positive and negative contact forms can be more complex than expected and positive and negative direct and indirect contact can interact in several ways (Árnadóttir et al., 2018; Schäfer et al., 2021). Finally, Rupar and Graf (2019) found that negative mass-mediated contact was positively associated with negative affect (i.e., intergroup threat).

MEDIATORS OF THE INDIRECT CONTACT–PREJUDICE REDUCTION RELATIONSHIP

While research has identified several mediators of the indirect contact–prejudice reduction relationship, we focus here on affect and perceptions of what “others” do, or in other words, social norms. Whereas changes in affect appear to be a common mediator for both direct and indirect contact (e.g., Paolini et al., 2004), changes in social norms are specific to indirect contact rather than direct contact, and thus, help differentiate them (e.g., De Tezanos-Pinto et al., 2010). It is possible to argue that under certain circumstances the emergence of a shared social identity with the hitherto outgroup (the emergence of a sense of “we” instead of “us vs. them”) leads to increased empathy, reduced fear and anxiety, and increased helping and trust toward the outgroup (Haslam et al., 2003). The salience of social identity also defines the relevant ingroup norms and motivates acting in line with such norms (e.g., Reynolds, Subasic, et al., 2015; Tajfel & Turner, 1986; J. C. Turner et al., 1987). Such shared group membership also defines who is representative of the group and has influence as a social referent (J. C. Turner, 1991).

Affect. One of the most commonly measured affective variables in the contact–prejudice relationship is intergroup anxiety. Intergroup anxiety refers to the discomfort an individual may feel when anticipating or experiencing intergroup encounters (Stephen, 2014; Stephan & Stephan, 1985). Empirical evidence has shown that positive intergroup contact experiences typically alleviate feelings of anxiety and threat, which in turn are associated with decreased prejudice (e.g., Pettigrew & Tropp, 2008; Swart et al., 2011; R. N. Turner, Hewstone, & Voci, 2007). There is a large body of correlational and experimental research that has identified intergroup anxiety as a key mediating variable for indirect contact, including extended contact (e.g., Paolini et al., 2004),

imagined contact (e.g., R. N. Turner, Crisp et al., 2007), vicarious contact (e.g., Koc & Anderson, 2018), E-contact (e.g., White et al., 2020), and parasocial contact (Orellana et al., in press).

In addition to intergroup anxiety, outgroup empathy is also a critical emotion that requires consideration. Empathy relates to an affective process that originates from, and conforms to, other people's perceived needs, and is frequently followed by taking the other's viewpoint to consider their situation (Batson, 1991). There are several prosocial outcomes linked to empathy, including positive evaluations and supportive actions at the interpersonal and intergroup levels (see Batson, 1991; Batson & Ahmad, 2009). Indeed, empathy felt toward or attributed to the outgroup enhances the effect of intergroup contact (e.g., help offer and help acceptance) and improves intergroup attitudes and relations (see Batson, 2010; Borinca et al., 2020; Galinsky et al., 2011; Nesdale et al., 2005; Tarrant et al., 2009). An extensive body of research has demonstrated the link between direct intergroup contact and empathy (Brown & Hewstone, 2005; Johnston & Glasford, 2018; Pettigrew & Tropp, 2008; Pettigrew et al., 2011) on improving intergroup attitudes and relations. There is also an increasing amount of research (mostly correlational) that has identified empathy as a critical mediating variable for indirect contact, including extended contact (e.g., Swart et al., 2011; Vezzali et al., 2017; Visintin et al., 2017), mass-media contact (e.g., Pagotto & Voci, 2013), and recently even imagined contact (e.g., Borinca et al., under review; Stathi, Guerra, et al., 2020, Studies 2 and 3).

Despite the abundance of research examining the mediating role of affective processes on the relationship between intergroup contact and prejudice, researchers still know relatively little about what features of the contact experience during the interaction can explain the subsequent reduction in prejudice. To this end, indirect contact researchers have begun to record participants' written responses during the intergroup interactions (e.g., West et al., 2015). Similarly, the text exchanged by E-contact participants provides contact researchers with a valuable, dynamic source of data that can be qualitatively analyzed to reveal underlying mechanisms of the contact-prejudice relationship. For example, White, Abu-Rayya, et al. (2015) employed Linguistic Inquiry and Word Count (LIWC; Pennebaker et al., 2015) software to objectively measure the quantity and quality of emotion expressed during White and colleagues' (White & Abu-Rayya, 2012; White et al., 2014) long-term E-contact intervention (described in more detail above). The authors found reduced expressions of anger and sadness in the intergroup condition to mediate the effect of contact on intergroup bias. Furthermore, viewing videos of outgroup characters taking care of each other and showing loving devotion, which evokes *kama muta* (moved by love) improves outgroup attitudes (Lyshol et al., in press). In the future, researchers may also be able to employ webcams and facial recognition software to monitor the nonverbal emotional expressions of participants as they engage in contact interactions.

Social norms

Social norms are defined as collective representations of what others do (descriptive norms) and what they think should be done (prescriptive norms) in a given situation (e.g., Cialdini et al., 1990). Although social norms are measured at the individual level, they are a social product, and as such they have a greater chance to produce long-term changes in the larger society. The norms reflect "what we do," and the impact of social norms is tied to people perceiving that the norm of interest is connected to an ingroup relationship where there is a perception of self-other similarity (family, community, nation, humanity; Reynolds, Subasic, et al., 2015). Accordingly, research has consistently shown that social norms are of great relevance regarding the effect of specific forms

of indirect contact (e.g., extended and vicarious), and that social identity processes (self-other overlap, identification with the target) are important.

Indirect contact, such as extended or vicarious contact, can influence both ingroup and outgroup norms. Indeed, intergroup relations are often shaped by negative intergroup expectations (Paolini et al., 2006), which have the potential not only to increase negative intergroup relations (e.g., Shelton & Richeson, 2005; Stathi, Di Bernardo, et al., 2020; Tropp, Mazziotta, et al., 2016), but also to prevent intergroup contact from improving intergroup relations. Therefore, being aware that ingroup members are in close contact with outgroup members (extended contact), or merely perceiving an ingroup member interacting with an outgroup member (vicarious contact), or interacting via a synchronous text chat (E-contact), can reduce the expectation that the ingroup has negative attitudes toward the outgroup.

Such knowledge transforms people's understanding of the nature of intergroup relations, which in turn affects prejudiced attitudes and behavior. Knowing that ingroup members have contact with outgroup members provides information about both groups and the nature of the intergroup relationship (e.g., conflictual versus co-operative). Such knowledge communicates a new norm for the ingroup and suggests that the outgroup is open to contact and should not be feared. Wright and colleagues (1997) have argued that the benefits of extended contact are related to the inclusion of the outgroup member's group in one's own representation of the self.

Consistent with this understanding, research provides evidence indicating that perceived ingroup norms constitute an independent mediator of the effect of extended contact on intergroup attitudes (e.g., Gomez et al., 2011; R. N. Turner et al., 2008). For instance, when individuals have knowledge that an ingroup member has a close relationship with an outgroup member, they may infer that intergroup contact is either sanctioned by the ingroup or even normatively supported (De Tezanos-Pinto et al., 2010). Being aware of cross-group friendship (i.e., extended contact) informs the ingroup's shared consensus about the outgroup and therefore leads to more positive intergroup attitudes (Wright et al., 1997). Accordingly, perceptions that close friends have contact with outgroup members are associated with more positive perceived ingroup norms (e.g., Gómez et al., 2011; R. N. Turner et al., 2008).

Research has also shown that indirect forms of contact can impact intergroup attitudes through changes in perceived outgroup norms. According to equity principles (e.g., treat the outgroup as they treat you; Jetten et al., 1996), the perception that outgroup members have negative attitudes toward the ingroup increases negative intergroup attitudes (e.g., Bastian & Haslam, 2010, 2011; Kteily et al., 2016). However, being aware about cross-group interactions also informs people that outgroup members have positive intergroup attitudes and are therefore willing to engage with ingroup members. Thus, the more people perceive outgroup members as willing to engage in intergroup contact, the higher their positive intergroup attitudes (Matera et al., 2012; Tropp & Bianchi, 2006; Zagefka et al., 2007). According to these findings, past research has shown that specific forms of indirect contact influence intergroup attitudes through perceived outgroup norms. For instance, the more people perceive extended contact, the more they perceive outgroup members as interested in being friends with ingroup members, which ultimately improves intergroup attitudes and increases cross-group friendships (e.g., Gómez et al., 2011; Marinucci et al., 2021; R. N. Turner et al., 2008; Vezzali et al., 2015; Wright et al., 1997).

The emergence of shared ingroup membership and the norms of tolerance connected to one's group is a driver for direct contact, such that contact is a product and an outcome of such processes (Reynolds, Subasic, et al., 2015). Therefore, ingroup norms not only influence individuals' intergroup attitudes and willingness for intergroup contact (e.g., Crandall et al., 2002; Jetten et al., 2002; Nesdale, et al., 2005), but also cross-group friendships (Cameron et al., 2011; Vezzali et al.,

2015). Along these lines, a prosocial ingroup norm (i.e., when individuals perceive that their group feels empathy toward an outgroup target) enhanced positive intergroup attitudes (Tarrant et al., 2009). The greater the number of ingroup members who have outgroup friends, the more positive expectations they have about future intergroup contact (e.g., Gomez et al., 2011). Finally, tolerant, unprejudiced group norms increase people's willingness to seek contact with outgroup members (Jugert et al., 2011; Tropp et al., 2014).

These findings are not only restricted to extended contact, as recent research has shown that perceived ingroup norms also account for the effect of alternative forms of indirect contact such as vicarious contact (e.g., Mäkinen et al., 2019; Vezzali et al., 2014). Finally, this effect appears even when controlling for direct intergroup contact (e.g., Gomez et al., 2011), and is independent of the effect of other mediators such as intergroup anxiety (e.g., Paolini et al., 2004) and inclusion of other in the self (e.g., Cameron & Rutland, 2006; see R. N. Turner et al., 2008).

Finally, research has also shown that the extent of conformity to ingroup norms is related to individuals' level of indirect contact. For example, negative ingroup norms increase outgroup prejudice in general, but this effect disappears when an individual's positive interaction with the outgroup is encouraged via imagined contact (Visintin et al., 2019). Indeed, research has shown that anticipating ingroup members having interaction with outgroups predicts interest in cross-group interaction for both majority and minority groups (Tropp et al., 2014). Similarly, Gomez et al. (2018) found that ingroup norms supporting cross-group friendship increased willingness for positive intergroup contact only when individuals previously learned that ingroup members had some level of outgroup contact (i.e., extended contact). Further, the belief that the outgroup had a genuine interest in intergroup contact mediated the positive effect of ingroup norms. Interestingly, Gomez et al. (2018) focused on what they called "depersonalized" extended contact, referred to contact via unknown ingroup members, therefore tapping into our definition of passive extended contact (cf. Table 1). This finding is consistent with our statement that there may be different types of extended contact: depersonalized extended contact may be qualitatively different from extended contact where individuals actually know ingroup members; for instance, it may act to a greater extent via social norms. Future research should investigate more closely the different forms that indirect contact can take and disentangle them in order to understand more precisely when and how they work. Finally, the *source* of the norm seems to have a different impact. Cross-sectional findings, for example, indicate that peer norms predict greater comfort in intergroup contact, intergroup friendship, and enhance the quality of such interaction. In contrast, longitudinal findings show that school norms predict greater cross-ethnic friendship engagement over time (Tropp, O'Brien et al., 2016).

Overall, these findings speak about the possibility that intergroup attitudes are not only predicted by indirect contact and social norms, but that they are also the consequence of complex interactions between these factors. Clearly, the link between social norms and indirect contact is not straightforward: norms can influence indirect contact, and indirect contact can influence norms; however, irrespective of the direction of influence, these two factors can also interact in order to better predict intergroup attitudes (e.g., Dhont & van Hiel, 2012; Mähönen et al., 2013). These findings also suggest that positive contact (i.e., help offered by an outgroup member) is not a sufficient condition to increase future intergroup contact intentions in a prejudiced normative context. More generally, sometimes (i.e., in intractable and/or high prejudiced contexts) norms and indirect contact do not have enough power individually to change intergroup relations, and only their interplay may have positive consequences. This is consistent with the idea that the benefits of positive intergroup contact should be coupled with normative support (Allport, 1954; Kende et al., 2017; Maunder et al., 2020; Merino, 2013).

APPLIED SOCIAL POLICY AND PRACTICE IMPLICATIONS

There have been calls for researchers studying prejudice to move beyond theoretical developments and laboratory-based studies to naturalistic settings (Paluck et al., 2019). There is a need for an evidence-based body of work that is practical and policy-relevant. Paluck et al. (2019) have argued that for policy makers the effectiveness of interventions needs to be demonstrated with experimental studies, and any impacts need to be assessed across a number of weeks or months. Similarly, Abrams (2010) has argued that “there is a dearth of good-quality longitudinal research on prejudice or prejudice reduction” (cited in Paluck et al., 2019, p. 68).

Some of the most promising work on prejudice reduction concerns indirect contact, due to the difficulty of manipulating direct contact in naturalistic settings. In fact, several experimental studies conducted in the laboratory manipulated direct contact but are unlikely to generalize to real-world settings (e.g., Mendoza-Denton & Page-Gould, 2008) and few studies have manipulated direct contact in the field. Realizing meaningful manipulations in real-world contexts is difficult and, when it is done, results may be weaker than those obtained in the laboratory (Moussa, 2020). The generalizability of findings obtained with experimental procedures in the laboratory is limited and also impacts the likelihood of realistically implementing direct contact (see Blascovich et al., 2002, for a discussion of more ecologically valid, laboratory-based approaches).

Intergroup interactions in artificial settings may produce more negative outcomes (e.g., stress, anxiety) because laboratory participants (a) may have few past contact experiences, (b) have no control over the laboratory situation (Amat et al., 2005), (c) may experience evaluation apprehension (Weber & Cook, 1972), and (d) may typically avoid intergroup interactions in everyday life (Mallet et al., 2008). In other words, those self-reporting more intergroup contact are likely to be lower in intergroup anxiety and less likely to avoid intergroup contact, whereas participants in laboratory studies may have little past contact and may even actively avoid intergroup interactions until they find themselves in the anxiety-provoking laboratory setting, inflating the negative effects observed. Different forms of indirect contact can be more easily manipulated in real-world contexts than direct contact, which is particularly appealing in a policy context because it may be possible to affect prejudiced attitudes and discrimination *en masse* without every individual having to have a direct contact experience with members of different outgroups.

One of the key factors that is emerging across several studies is the importance of a shared social identity between members of different groups, and its impact on affect and social norms. When an inclusive and supportive shared identity emerges, there is increased tolerance and empathy and less prejudiced attitudes (White & Abu-Rayya, 2012). Leaders and authorities play a central role in the emergence (or not) of such a shared identity and the characteristics that define who “we” are as group members (in a nation, organization, community, intervention cohort). These identity management processes are a “lever” of high relevance for social policy and practice (e.g., Reynolds, Bathala, et al., 2015; Subasic et al., 2015, 2018). Efforts to establish a shared social identity where who “we” are is defined as valuing and respecting diversity, for example, can increase tolerance (Haslam et al., 2003). The conditions that produce a shared social identity are also those that meet Allport’s (1954) ideal conditions for contact (authority/leader sanctioned, equal groups, common purpose) and their subsequent impact on prejudice reduction. As outlined above, shared social identity is both an antecedent of positive indirect and direct contact and a potential product of such contact (Reynolds, Subasic, et al., 2015).

Political rhetoric and national aspirations for tolerance and multiculturalism (and the contestation of such beliefs), for example, inform the societal milieu and social norms concerning who

“we” are, and what “we” do, which also influence indirect and direct contact frequency, valence, and impact. This is consistent with the idea that opportunities for contact must be supported by positive intergroup norms to yield their full potential to improve intergroup relations (Pettigrew et al., 2007; Ramiah et al., 2015). This is also consistent with the idea that direct intergroup contact buffers the influence of social norms on prejudice (e.g., Dhont & van Hiel, 2012; Jasinskaja-Lahti et al., 2011; Mähönen et al., 2013; Rodríguez-García & Wagner, 2009; Sechrist & Stangor, 2007).

Vicarious or parasocial indirect contact holds particular promise for application through public policy and community programs. For example, researchers working with an initiative by the nongovernment organization LaBenevolencija, in Rwanda, attempted to promote reconciliation between Hutu and Tutsi post the 1994 violence and genocide through the development of a year-long “education entertainment” radio soap opera. The intervention radio drama program documented struggles with prejudice, violence and trauma while a control soap opera included messages about health and HIV. Those who heard the radio soap opera about prejudice reported changes in their perception of social norms (e.g., more inclusive social norms relative to intermarriage) and behaviors (e.g., more group cooperation within communities; Paluck, 2009). It is possible that the radio soap opera about prejudice and violence communicated new norms and ways to think about being Rwandan (e.g., what other Rwandans do or should do). In fact, the characters were designed to be typical, realistic Rwandans, in order to change perceptions of social norms. Based on the social identity approach and analysis of social influence (J. C. Turner, 2005), the greater the extent to which viewers perceived the characters in the soap opera as representing Rwandans like themselves—the same ingroup—the more impact the documentary would have had on attitudes and behavior. Other work has focused on persuasion attempts by social referents or prototypical ingroup members to shape attitudes and behavior (Paluck & Sheperd, 2012).

There are a range of issues, though, that need to be addressed to expand the application of social psychology theory and research and its policy uptake. Most interventions utilizing different forms of indirect contact have used one-off, small studies with limited assessment of longer-term impacts. Most studies have been conducted by researchers instead of educators or practitioners working in schools, communities, or workplaces. Some teacher-led interventions have been found to not yield as strong effects as researcher-led school interventions (see Ülger et al., 2018). These factors hinder applicability because the models have not been developed and demonstrated for use by a wide range of practitioners. There is a need for more translational and applied work and training so that practitioners have the necessary “roadmap” and skills to effectively lead to real-world interventions to transform mindsets.

Taking a broader view, there is also evidence that public policy itself may operate like a form of indirect contact establishing cultural knowledge and shaping social norms—who “we” are and what “we” do. We highlight this as an extension to current theory and research that may open up new ways to conceptualize indirect contact and links to applied contexts including country- or community-based policy settings determined by political and community leadership. The social milieu is shaped by public policy that provides a context to promote tolerance and intergroup harmony and advance social cohesion because it is sanctioned by authority and emphasizes one’s common humanity (or nationhood).

More specifically, Guimond et al. (2013) investigated the influence of social (cultural) norms with respect to political and public policy support for diversity (multiculturalism versus assimilation) on individuals’ endorsement of diversity ideology and prejudice. They hypothesized that the more effective the diversity policy in a country, the more alignment there would be with individuals’ personal diversity beliefs and the perceptions of the norm. They also predicted that personal diversity beliefs endorsing multicultural sentiments would correlate negatively with

prejudice. The sample included four countries with varying multiculturalism policies: Canada (highly multicultural), the United States (medium pro-diversity), the United Kingdom (medium pro-diversity), and Germany (highly assimilative). While the student populations across the four countries endorsed multiculturalism compared to assimilation, perceptions of the cultural norm varied across the four countries. Compared to the other three countries, Canadian students endorsed multiculturalism beliefs personally and also perceived the cultural norm to be supportive of multiculturalism. This alignment between the cultural norm and personal beliefs is taken as evidence for the strength of policy and societal practices in shaping social norms, which in turn can impact on attitudes and behavior.

Public policy related research fits distinctions outlined in Table 1 as a passive interaction that occurs through a medium (public policy) opening up consideration of factors that affect the social milieu or wider social and political context as also being relevant to the study of indirect contact. It also reconnects contact theory and research with work on prejudice reduction and behavior change more broadly where social identity, leadership, norms, and efficacy are of growing interest (Hagger et al., 2020). In this section, we have highlighted the efforts of NGOs in parasocial contact and the role of public policy, which defines national approaches to ethnic diversity. These examples have direct relevance to practice and offer an expanded research agenda.

CONCLUSION AND FUTURE DIRECTIONS FOR INDIRECT CONTACT

We have provided a conceptual framework that considers the main forms of indirect contact according to two orthogonal dimensions: activity/passivity, and the medium through which indirect contact occurs. This framework not only has a descriptive purpose—highlighting when the different forms of indirect contact overlap or instead could be considered as complementary—but it can also help inform social policy development. In fact, although active involvement is important for intervention effects to occur (Oskamp, 2000), also indirect contact mostly based on passive interactions (e.g., vicarious contact) has proven to be successful. We therefore argue that indirect contact may have more chances of success when it is balanced in terms of this distinction, by integrating both an active approach (e.g., E-contact) paired with information obtained passively (e.g., vicarious contact). Note that, in so doing, a crucial factor to take into account is the social nature of the indirect contact strategy.

Individuals rely on both direct and indirect experiences to form attitudes, although generally direct experiences are more relevant to attitude formation than indirect experiences (Fazio et al., 1983). Therefore, an intervention may balance an active strategy that relies on experiences obtained personally, such as E-contact, and a passive intervention that exposes individuals to the powerful influence of social norms, such as extended contact. This way, the individual should find converging evidence from both active and passive approaches, from the self and from others, of the positivity of the outgroup. In addition to integrating these various approaches, future research could evaluate whether they are equally effective in improving intergroup attitudes of minority or majority group members. For example, Bagci et al. (2019) found that imagined contact had a stronger effect on majority attitudes, whereas for extended contact, Zhou et al. (2019) reported no significant group status differences. Being aware of how each form of indirect contact affects minority or majority group members similarly or differently (see Hässler et al., 2021) will help policy makers decide which type of intervention to implement.

It is worth noting that we have treated indirect contact forms as alternatives to direct contact approaches. Direct and indirect contact can in fact be considered as independent factors.

Supporting this conclusion, as an example, the majority of extended contact studies have revealed that direct and extended contact have additive effects, that is, they are independently associated with outgroup attitudes (Vezzali et al., 2014; Zhout et al., 2019). In this sense, indirect contact strategies can also be used in isolation from direct contact. However, direct and indirect contact can also be seen as interdependent on different levels. First, as an example, direct and extended contact often overlaps, for example, when individuals have contact with an outgroup member both face to face and because an ingroup friend is also friends with that outgroup member (Munniksma et al., 2013; Wölfer et al., 2015). Second, it has been shown that the effects of parasocial contact are stronger when individuals lack personal direct contact experiences (Schappap et al., 2006), although evidence for the interaction between direct and indirect contact is mixed and requires further examination of the conditions where this happens (Árnadóttir et al., 2018). Third, indirect and direct contact can predict each other. For instance, consistent with theorizing that indirect contact can prepare individuals for direct contact (Eller et al., 2012; R. N. Turner, Hewstone, Voci, et al., 2007), extended contact was found to be longitudinally associated with greater reengagement in direct contact (Vezzali et al., 2015; Wölfer et al., 2019). Future research should focus on how and when the different forms of direct and indirect contact interact and how their interdependent action may be used to inform more comprehensive and impactful theoretical models.

We have also highlighted two main types of processes underlying the effects of indirect contact. Affect has repeatedly been shown to be the main road to prejudice reduction (Pettigrew & Tropp, 2008). Although many forms of indirect contact have generally been considered as mainly “cognitive,” there are indications that they also exert their effects through affect (Birtel et al., 2018; Vezzali et al., 2013). Social norms are important not only to change individual attitudes, but also for obtaining large-scale impacts. It is argued that both emerge from a perception of self-other similarity where definitions of who “we” are and what “we” do are defined by tolerance toward the hitherto outgroup. Political leadership, local organizations (e.g., NGOs), and laws and public policy shape the meaning of our group memberships and associated norms and there is contestation with many parties vying to influence. Identity management underpins much of the work with respect to indirect contact whether in the form of E-contact, media, community programs, or public policy.

We believe indirect contact can be especially relevant to produce generalized reduction in prejudice and promote positive intergroup relations. In fact, while direct contact is extremely effective, it requires that each individual have contact with an outgroup member to work. Indirect contact, such as extended contact, vicarious contact and parasocial contact can take advantage of mass media. Capitalizing on them, researchers in collaboration with practitioners can create large-scale interventions that, by shaping social identity and associated ingroup norms and at the same time driving affective processes, have greater chances of being maximally effective. Similarly, interventions based on E-contact can produce large-scale changes, since they are potentially oriented to all those connected to the Internet, overcoming the main limitation of direct contact that is whether each person can have contact with an outgroup member (an advantage that is shared with imagined contact). Finally, imagined contact could encourage and/or prepare people to envision (in their minds) a possible interaction with an outgroup member, and this could be helpful, especially before any normative intervention. Clearly, there is a need for improved cooperation and communication between policymakers, educators, and indirect contact researchers (see Brown & Hewstone, 2005; Lemmer & Wagner, 2015) in order to (i) increase awareness about the effectiveness of the different forms of indirect contact available and (ii) to better understand *when* to implement the most appropriate form of indirect contact to match the resources available (i.e.,

the availability of the Internet, the presence of outgroup friends, the cognitive capacity to imagine positive intergroup interactions, etc.).

When indirect contact was first identified, the common assumption was that it would help overcome the limitations of direct contact, such as its feasibility in naturalistic contexts. Departing from this earlier but still widely shared idea, we have argued here that research has shown that indirect contact has its own independence and specificity that is complementary to direct contact, rather than representing a mere substitute for it. In fact, indirect contact has proven to be more flexible and less costly than direct contact, resulting in a greater chance to be used in naturalistic situations, such as in educational and/or work contexts. Second and more importantly, indirect contact has a greater chance to influence large sectors of the population, especially if applied to and integrated with public policy and media channels. An expanded view of indirect contact is justified, but this now must be accompanied and verified by a larger research enterprise focused on naturalistic longitudinal experiments and programs that can be successfully implemented by practitioners. Producing real, stable, and enduring social change is precisely what scholars and practitioners should continue to strive for.

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