



Functional roles of mediated and extended mediated contact in promoting intergroup attitudes and post-conflict forgiveness: Mediating effects of cultural affinity

Chun Cao¹ · Qian Meng²

Published online: 15 January 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract

Due to the recent conflicts between China and South Korea (mainly the THAAD incident), we intended to examine whether mediated intergroup contact through TV series and films can be beneficial for improving their intergroup relations. Moreover, a novel type of indirect intergroup contact was proposed and termed as extended mediated contact. The general objective is to investigate and differentiate its relationships with intergroup relations (i.e. intergroup attitudes and post-conflict forgiveness) with those of mediated contact. Chinese university students were selected as the sample of our study and 366 participants completed an online survey. Results from the structural equation modeling (SEM) analysis revealed that both mediated and extended mediated contact positively predicted cultural affinity, which, in turn, positively predicted both intergroup attitudes and post-conflict forgiveness. As compared to mediated contact, extended mediated contact exerted significant but weaker effects. The bootstrapping method in SEM revealed that cultural affinity played a mediating role in the relationships of the two types of contact to intergroup attitudes and forgiveness.

Keywords Extended mediated contact · Mediated contact · Cultural affinity · Intergroup attitudes · Intergroup forgiveness

Introduction

China and South Korea are distant neighbors. Their diplomatic relations remain very ambiguous and complex. On the one hand, the two countries are inter-dependent for cooperation in economics and business (Kim and Heo 2016). On the other hand, conflicts occasionally arise between the two countries due to South Korea's military dependence on the U.S. (Chen 2013) and China's political ties with North Korea (Chung and Choi 2013). As a result, a recurring fluctuating pattern can be noted in their diplomatic relations, as well as in public attitudes toward each other (Kim and Cha 2016). Tension between the two countries reached its highest point in 2017

when South Korea decided to accept America's deployment of the Terminal High-Altitude Area Defense (THAAD) in South Korea. Chinese government immediately and repeatedly expressed its strong condemnation of this decision for fear that THAAD be utilized by the U.S. to aim China (Swaine 2017). In the meantime, Chinese citizens launched various demonstrations and protests in many cities against South Korean government, carrying slogans such as "No THAAD" and "Resist South Korean Products" (Bi 2017). Although the two countries worked jointly to get their relations back on track at the end of 2017, the hostile attitudes held by Chinese and South Koreans toward each other are still pervasive (Sun 2017). In this study, we did not intend to be judgmental on this incident, but aimed to understand factors that can potentially promote intergroup attitudes and post-conflict forgiveness by targeting Chinese citizens.

The contact hypothesis states that direct (face-to-face) intergroup contact can effectively alleviate intergroup prejudice and improve intergroup attitudes under optimal conditions of common goals, equal status and cooperation (Allport 1954). Over 50 years of research has provided robust support for this theory (e.g. Brannon and Walton 2013; Cao et al. 2017; Hewstone and Brown 1986). Nonetheless, in many cases opportunities for direct intergroup contact are fairly limited,

✉ Qian Meng
mengqianlucky@aliyun.com

Chun Cao
caogecheng@aliyun.com

¹ Faculty of Education, Northeast Normal University, 5268, Renmin Street, Changchun, China

² Changchun University of Science and Technology, 7186, Weixing Road, Changchun, China

especially in aftermath of intergroup conflicts (Rupar and Graf 2019; Visintin et al. 2017). Therefore, one main contribution to the contact hypothesis is that researchers have found that indirect forms of intergroup contact (e.g. mediated contact, online contact, and imagined contact) that do not involve actual face-to-face contact can also have the potential to shape positive attitudes toward and foster positive relationships with outgroup members (e.g. Cao et al. 2018; Eyal and Dailey 2012; Wojcieszak and Azrout 2016).

Based on Allport's contact hypothesis, our study examined an indirect form of intergroup contact, namely mediated intergroup contact which refers to exposures to outgroup members through mass media (e.g. magazines, books, newspapers, TV series, and films) (Wojcieszak and Azrout 2016). More specifically, we were particularly interested in mediated contact through TV series and films because many of these entertainment programs produced by South Koreans have gained popularity in China since the beginning of the twenty-first century, creating a so-called "Korean Waves" (Kang 2017). For instance, the South Korean TV series "Descendants of the Sun" was viewed 2.8 billion times by Chinese people in less than two months after it was imported to China in 2016 (Jiang 2017). Hence, such contexts were suitable to examine whether viewing South Korean TV series and films via mass media (e.g. TV, Internet, and social media) can be a positive predictor of Chinese people's attitudes and forgiveness toward South Koreans. More importantly, our study intended to explore a novel type of indirect contact: merely knowing and observing close in-group members' (e.g. family members or in-group friends) viewing foreign entertainment programs through mass media. This novel type of contact was theoretically inspired by the extended contact proposed by Wright et al. (1997), which refers to knowing about in-group members having out-group friends and has been revealed to influence attitudes toward the outgroup (Dhont and Van Hiel 2011). For consistency, we termed it as extended mediated contact. Extended mediated contact can be more indirect than mediated contact because the former does not involve personal viewing of foreign entertainment programs. Investigating extended mediated contact can potentially provide the theoretical and empirical evidence that effects of media exposures to outgroup members can reach a wider population beyond the viewers.

To sum up, this study simultaneously examined and differentiated functional roles of the two types of indirect contact in predicting intergroup attitudes and post-conflict forgiveness. Further, we assumed that cultural affinity may play a mediating role in these relationships. Cultural affinity is a concept that tends to be interpreted in two ways in the existing literature. Some studies interpret it as a cognitive factor, referring to cultural or ethnic similarities, used interchangeably with cultural proximity (e.g. Fourie and Santana-Gallego 2013). Some others use it as an affective factor, measuring the extent to

which an individual likes or shows interest in a particular culture (e.g. Park 2005; Swift 1999). In our study, the concept of cultural affinity is consistent with the latter one and defined as Chinese people's liking for and interest in South Korean cultures. Prior studies have provided solid evidence that the relationships of intergroup contact with intergroup attitudes or relations can be mediated by such affective factors as intergroup anxiety, threat, trust, and empathy (Pagotto and Voci 2013; Visintin et al. 2017). In contrast, the mediating role of cultural affinity, which is also operationalized as an affective factor in this study, remains largely unclear in the existing literature. Thus, exploring its mediation may further extend our understanding of the mechanisms underlying the link between intergroup contact and intergroup relations.

Mediated and Extended Mediated Contact and their Relationships with Intergroup Relations

Mass media are regarded as a means of connecting culturally different people across time and space, particularly in the current era characterized by Internet and mobile media (Vincze and Harwood 2013). Scholars argue that indirect intergroup contact through mass media can comprise an experience analogous to direct face-to-face intergroup contact, also enhancing outgroup attitudes (Wojcieszak and Azrout 2016). In a media-rich setting, individuals can parasocially "know" more cultural others by viewing foreign TV series and films (Schiappa et al. 2005). Individuals are endowed with the capacity to learn from observation of these culturally different media characters, thus internalizing affective and cognitive responses to situations they do not experience directly (Bandura 2002). Once learned, individuals may acquire new information about the outgroup and develop refreshed attitudes toward the outgroup (Joyce and Harwood 2014). Prior studies have also provided empirical evidence that mediated contact can be beneficial for improving intergroup attitudes. For instance, Ortiz and Harwood (2007) found that the amount of U.S. citizens' viewing TV series about homosexuals enhanced their positive attitudes toward this group. In another instance, Joyce and Harwood (2014), employing an experimental design, showed that televised mediated contact was positively predictive of U.S. citizens' attitudes toward illegal immigrants. A more recent study indicated that Italians' mediated contact through films and TV series had direct effects on empathy and trust for immigrants and indirect effects on reduced prejudice toward immigrants (Visintin et al. 2017). In Asian contexts, Shim et al. (2012) found that South Korean students' viewing American dramas enhanced their behavioral attitudes toward Americans.

Besides intergroup attitudes, another outcome variable of this study is intergroup forgiveness. Though research on intergroup forgiveness is quite young, it has become one promising field in psychological research (Strelan and Lawani 2010;

Voci et al. 2017). It is therefore of significance to examine whether mediated contact can contribute to intergroup forgiveness, especially in the damaged relations between China and South Korea. Recent studies have found that mediated contact can promote one's empathy with and trust for outgroup members (Pagotto and Voci 2013; Visintin et al. 2017), both of which are antecedents of forgiveness (Antonucci et al. 2018; Swickert et al. 2016). Media exposures to positive portrayals of outgroup members with former conflicts can help facilitate prejudice reduction toward that outgroup (Paluck and Green 2009). There is also emerging evidence that interventions through mass media can enhance positive intergroup relations damaged in recent violent conflicts (Bilali et al. 2017). More relevant to our research objectives is the study by Rupar and Graf (2019) in which mediated contact was a predictor of post-conflict forgiveness, as well as two forms of reparation: apology and financial compensation. These studies can lend support for our assumption that Chinese people's viewing South Korean entertainment programs may promote their forgiveness for South Koreans.

More importantly, our study intended to examine whether extended mediated contact can function as a means to enhancement of intergroup attitudes and forgiveness above and beyond mediated contact. As discussed previously, extended mediated contact is a more indirect contact form than mediated contact because it does not involve personal viewing of foreign TV series or films. Wright et al. (1997) first proposed the extended contact hypothesis and found that extended contact (i.e. merely knowing and observing positive relations between in-group friends and outgroup members) can reduce prejudice toward and promote positive relations with members of the outgroup. Based on the extended contact hypothesis, there is a reason to hypothesize that knowing and observing close in-group members' enjoyment of outgroup entertainment programs may as well promote one's positive attitudes toward this particular outgroup and their cultural traditions and practices. Furthermore, the two-step flow theory (Katz and Lazarsfeld 1955) can also shed light on the assumed relationship between extended mediated contact and intergroup relations. The theory articulates that influences of mass communication often flow in the first step among those who pay close attention to or show great interest in a certain topic or issue. Thus, these individuals can act as "opinion leaders". In the second step, the "opinion leaders" tend to disseminate the relevant information or knowledge to the less active sections of the population who act as "opinion receivers". In a similar vein, individuals who show strong interest in and frequently view entertainment programs from a particular culture tend to act as "opinion leaders" because through positive portrayals of outgroup members they can detect and learn information and messages embedded with cultural codes (Visintin et al. 2017). It is possible that the viewers would share the specific cultural or behavioral characteristics with their close

in-group members, such as family members and friends. The sharing behaviors can add to their in-group members' knowledge and understanding of the target outgroup, thus contributing to their enhanced intergroup attitudes (Vincze and Harwood 2013). Such evidence can provide support for the hypothesis that extended mediated contact has the potential to be functional in promoting intergroup relations.

Mediating Roles of Cultural Affinity

In this study, it is assumed that the relationships of mediated and extended mediated contact with intergroup attitudes and forgiveness may not be simple and direct ones, and cultural affinity may play a mediating role in these relationships. Cultural affinity is conceptualized as Chinese people's liking for and interest in South Korean cultures and can be interpreted alternatively as an affective expression when an individual feels identified with a particular culture (Swift 1999). Although Chinese and South Korean cultures share some similarities in collectivism and Confucian values, their respective cultural norms, social traditions, and life styles display enormous differences and are becoming increasingly heterogeneous (Yoo et al. 2014).

The precondition for a mediation process is that the mediator variable should be significantly associated with both the predictor variable and the outcome variable (Baron and Kenny 1986). First, previous studies can support the assumed relationship between mediated contact and cultural affinity. According to Brannon and Walton (2013), participating in cultural activities can spark interest in and foster favorable emotions for the target culture. Individuals' media exposures to a different culture is a vicarious means of cultural participation and can promote their positive perceptions of the culture (Park 2012). Empirical evidence can be provided by the study of Park (2005) in which South Korean college students' mediated contact with Japanese cultures (e.g. through newspaper, TV, Internet, films, and music) was found to be a predictor of their affinity for Japanese cultures. Zhang and Xu (2007), using a mixed method, found that the more South Korean TV series Chinese university students viewed, the more they became identified with South Korean cultures.

Second, we can obtain some clues about the relationship between cultural affinity and intergroup relations from some prior studies. For instance, minority members' cultural identification, as measured by preference for and adoption of the host culture, can facilitate forming positive intergroup attitudes toward host members (Cao et al. 2018; Zagefka and Brown 2002). We hypothesize that this finding may as well apply to other social settings where the target outgroup members are largely absent; that is, individuals who like or show interest in a particular foreign culture (i.e. cultural affinity) may hold positive attitudes toward people from this culture. This claim is made also because culture is an essential

collective trait of a social group and largely shape the way social members behave (Samovar and Porter 2009). In Brannon and Walton's (2013) experimental study, non-Latino Americans' interest in Mexican cultures was found to be able to reduce their implicit bias against Latinos and increase their intentions to communicate with Latinos.

These aforementioned research may inform that mediated and extended mediated contact are likely to positively predict cultural affinity, which may, in turn, positively predict intergroup relations. Specifically, media exposures to outgroup members' TV series and films may serve as an effective channel for viewers to know, understand and learn a foreign culture, such as social customs, behavioral characteristics, and life styles (Vincze and Harwood 2013). The increased knowledge of the target culture through frequent media exposures may arouse the viewers' affective responses, such as stronger interest in the culture. In turn, the affective shift may promote the viewers' positive attitudes toward members of the target outgroup (Brannon and Walton 2013). Moreover, scholars have extensively investigated mediating effects of affective variables on the relationships of intergroup contact to intergroup attitudes (Hayward et al. 2017; Visintin et al. 2017) and intergroup forgiveness (Tam et al. 2008). Some of them are negative affective mediators (e.g. intergroup anxiety and threat), while others are positive affective mediators (e.g. intergroup empathy and trust). Moving beyond these studies, our study may expand the extant research by suggesting a new pathway from mediated and extended mediated contact to intergroup relations via the affective mediator of cultural affinity. Empirical support can be obtained from Joyce and Harwood (2014) who found that strong liking for the culture of the media characters fully mediated the relationship between positive mediated contact and intergroup attitudes. In another instance, host culture identification was revealed to mediate the relationship between intergroup contact and positive intergroup relations (i.e. social support, social connectedness, and reduced prejudice) (Cao et al. 2018).

The Present Study

Drawing on the reviewed research and China-South Korea relations, the present study aimed to examine the relationships of mediated contact to intergroup attitudes and forgiveness, via the potential mediator of cultural affinity. We also proposed the extended mediated contact and intended to differentiate its functional roles with those of mediated contact. To achieve these goals, a conceptual research model (see Fig. 1) was outlined, and hypotheses were formulated as follows.

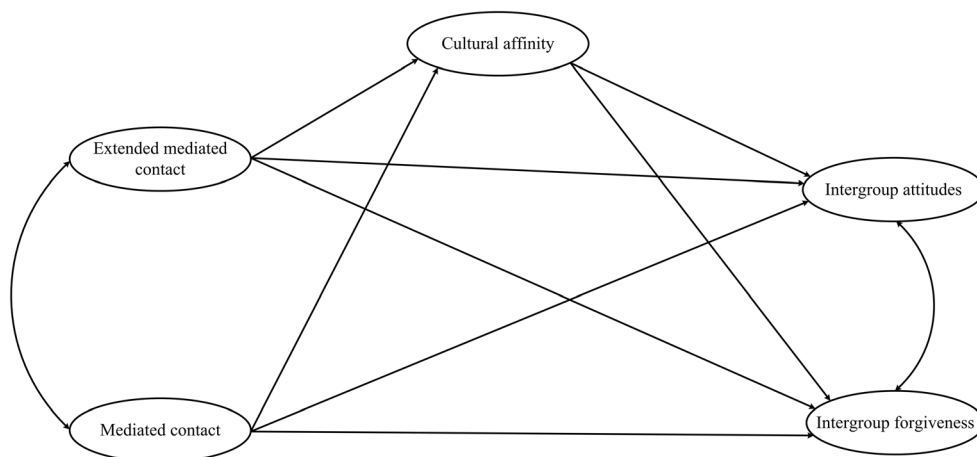
- **H1.** Mediated contact will be positively associated with cultural affinity.
- **H2.** Extended mediated contact will be positively associated with cultural affinity.
- **H3.** Cultural affinity will be positively associated with intergroup attitudes and forgiveness.
- **H4.** Cultural affinity will mediate the relationships of mediated contact to intergroup attitudes and forgiveness.
- **H5.** Cultural affinity will mediate the relationships of extended mediated contact to intergroup attitudes and forgiveness.

Methods

Participants and Procedure

We decided to focus on Chinese university students for testing these above hypothesized direct and mediated relationships for three reasons. First, this group is strongly motivated to engage in intercultural activities and embrace cultural differences (Meng et al. 2017). Second, South Korean entertainment programs have gained popularity among this group (Kang 2017). Third, the majority of Chinese university

Fig. 1 The conceptual research model



students live in on-campus dormitory buildings with four or six sharing one room. This concentrated living environment would enable them to observe whether and to what extent their surrounding peers enjoy South Korean entertainment programs, which can increase chances of examining extended mediated contact.

The data collection began in March of 2018 and lasted more than one month. To reach the participants, we employed a very popular social media in China, namely “Wechat”. This social media has emerged as a “must have” communication tool in China with over one billion active users per month (Gan and Li 2018). Many universities have created friend groups on the social media consisting of students in different academic disciplines for sharing information or making announcements. We first contacted two student affairs administrators at two Chinese universities located in Northern part of China. With their help, research objectives, anonymity and the link to the online questionnaire were then posted in online friend groups of “Wechat”, created by the two universities, wherein students were invited to voluntarily participate in the research. Altogether 366 Chinese university students completed and submitted the online questionnaire together with the informed consent to participate in the research.

Of the total sample, 53.3% (195) were male students and 46.7% (171) were female students. Their ages ranged from 17 to 30 ($M = 19.45$; $SD = 1.28$). Reported academic majors were as follows: natural sciences ($N = 229$; 62.6%) and social sciences ($N = 137$; 37.4%). None had study abroad experiences in South Korea, and only 3.3% ($N = 12$) of the participants had travelling experiences in South Korea.

Measures

Mediated Intergroup Contact In the heading for the scale of mediated contact, it was explicitly stated that mass media referred to any media channel through which one can view South Korean TV series or films, for example TV, Internet or mobile media. Two of the total three items were adapted from Yoo et al. (2014), assessing contact frequency. The participants were asked to indicate how often they viewed South Korean TV series or films during the previous year (categories ranging from 1 = very infrequently to 5 = very frequently) and how many South Korean TV series or films they have viewed during the previous year (from 1 = none to 5 = very many). The third item was added to assess how much the participants liked viewing South Korean TV series or films (from 1 = not at all to 5 = very much). Cronbach’s alpha was .88.

Extended Mediated Intergroup Contact To measure this novel type of contact, the participants were asked to indicate to what extent their family members or close friends viewed and liked viewing South Korean TV series or films using the same three

items measuring mediated intergroup contact. Cronbach’s alpha was .89.

Cultural Affinity Cultural Affinity Scale (Park 2005), consisting of four items, was used to measure Chinese students’ liking for South Korean cultures (item example: I desire to experience South Korean cultures). Each item was rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). A higher score indicated a higher level of liking for South Korean cultures (Cronbach’s alpha = .84).

Intergroup Attitudes Eight semantic-differential items adopted from prior studies (Lam and Katona 2018; Wright et al. 1997) were used to measure the participants’ evaluations of South Koreans on a scale ranging from 1 (not at all) to 5 (very much). Specifically, Chinese students were presented with eight statements about their perceptions of South Koreans’ traits: cold (R), aggressive (R), trustworthy, clever, friendly, arrogant (R), kind-hearted, and hard-working. Items marked by (R) were reverse coded so that higher scores indicated more positive attitudes toward South Koreans (Cronbach’s alpha = .92).

Intergroup Forgiveness In the heading for this scale, we briefly introduced recent political and business disputes between China and South Korea, such as the THAAD incident and fishery disputes, though they may have been known to every participant. This scale was measured by three items (Hamer et al. 2017). A sample item was “I have forgiven South Koreans despite some recent conflicts between China and South Korea”. A higher score would be reflective of a higher level of intergroup forgiveness (Cronbach’s alpha = .71).

Results

Preliminary Analysis and Control Variables

Descriptive statistics and correlations between the variables are provided in Table 1. The results revealed that both mediated and extended mediated contact positively correlated with the mediator and outcome variables.

We conducted a series of independent t-tests to examine whether there were some differences in cultural affinity (i.e. mediator variable), intergroup attitudes and forgiveness (i.e. dependent variable) across groups of gender and academic majors. The results showed significant gender differences in cultural affinity ($t = -6.336$, $p < 0.001$) and intergroup attitudes ($t = -2.908$, $p < 0.01$). Specifically, female students showed greater liking for South Korean cultures ($M = 3.24$, $SD = 0.81$) than male students ($M = 2.69$, $SD = 0.84$). Female students ($M = 2.89$, $SD = 0.58$) also exhibited stronger positive attitudes toward South Koreans than male students ($M =$

Table 1 Means, standard deviations and correlations of the variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Mediated contact	2.45	.95	–				
2. Extended mediated contact	2.43	.79	.552**	–			
3. Cultural affinity	2.95	.87	.494**	.413**	–		
4. Intergroup attitudes	2.79	.63	.416**	.263**	.501**	–	
5. Intergroup forgiveness	2.41	.75	.245**	.196**	.314**	.521**	–

** $p < .01$

2.70, $SD = 0.65$). No other differences were found. Therefore, gender will be included in the research model for further analysis.

Testing the Measurement Model and Common Method Variance

The measurement model which contained the five latent variables was evaluated by means of confirmative factor analysis (CFA) using the AMOS 22.0 software. The model evaluation indicated a good model-data fit: $\chi^2 (175, N = 366) = 382.003$, $p < 0.001$, $\chi^2/df = 2.183$ (recommended: < 3), SRMR = 0.050 (recommended: $< .08$), RMSEA = 0.057 (recommended: $< .06$), CFI = 0.955 (recommended: $> .95$) and TLI = 0.946 (recommended: $> .90$) (Byrne 2010).

All factor loadings of the observed indicators on the latent variables were significant at the level of $p < 0.001$, ranging from 0.56 to 0.90. Average variance extracted (AVE), square roots of AVE and Composite reliability (CR) for model constructs are provided in Table 2. The results indicated that all values of CR, AVE, and square roots of AVE exceeded their respective threshold values (for CR: larger than 0.60; for AVE: larger than 0.50; for square roots of AVE: larger than a specific variable's correlation coefficients with all other variables), demonstrating satisfactory construct reliability, convergent validity, and discriminant validity of the measurement model (Bagozzi and Yi 1988; Chin 1998).

Use of self-reported items in cross-sectional studies might raise the possibility of common method bias. Therefore, we conducted the Harman's single factor test, as recommended by Podsakoff et al. (2003). All items of the five latent variables were forced to load on a single un-rotated factor, which extracted only 36.1% of the total variance, showing that much of

the variance was not captured by this single factor. In addition, a one-factor model was tested and revealed a very poor model fit, $\chi^2 (185, N = 366) = 1992.491$, $p < 0.001$, $\chi^2/df = 10.770$, SRMR = 0.127, RMSEA = 0.164, CFI = 0.610 and TLI = 0.558. Taken together, these results showed that common method bias may not be a problem for the present study.

Testing the Structural Model

After the measurement model was confirmed to be acceptable, we tested the structural model which was slightly larger than the measurement model due to the inclusion of gender. The structural equation modeling (SEM) analysis yielded an acceptable model fit: $\chi^2 (192, N = 366) = 407.695$, $p < 0.001$, $\chi^2/df = 2.123$, SRMR = 0.050, RMSEA = 0.055, CFI = 0.954, TLI = 0.945. Figure 2 provided the standardized path coefficients among the variables under study. The results indicated that both mediated ($\beta = 0.42$, $p < 0.001$, 95% CI [0.278, 0.662]) and extended mediated contact ($\beta = 0.19$, $p = 0.005$, 95% CI [0.043, 0.414]) positively predicted cultural affinity. Thus, H1 and H2 were supported. Cultural affinity predicted both intergroup attitudes ($\beta = 0.44$, $p < 0.001$, 95% CI [0.158, 0.348]) and intergroup forgiveness ($\beta = 0.24$, $p = 0.004$, 95% CI [0.039, 0.322]), supporting H3. Besides, gender (female) was positively predictive of cultural affinity ($\beta = 0.15$, $p = 0.002$, 95% CI [0.084, 0.465]), showing that female students seemed to display greater liking for and identification with South Korean cultures than male students. However, gender was not predictive of intergroup attitudes ($\beta = -0.02$, $p = 0.773$, 95% CI [-0.115, 0.071]).

Table 3 presents direct, indirect, and total effects of the exogenous variables on the endogenous variables. By contrast, mediated contact had stronger total effects on cultural

Table 2 CR, AVE and square roots of AVE for the latent constructs in the measurement model

Value	Mediated contact	Extended mediated contact	Cultural affinity	Intergroup attitudes	Intergroup forgiveness
CR	0.89	0.88	0.85	0.92	0.83
AVE	0.72	0.72	0.59	0.58	0.62
Square roots of AVE	0.85	0.85	0.77	0.76	0.79

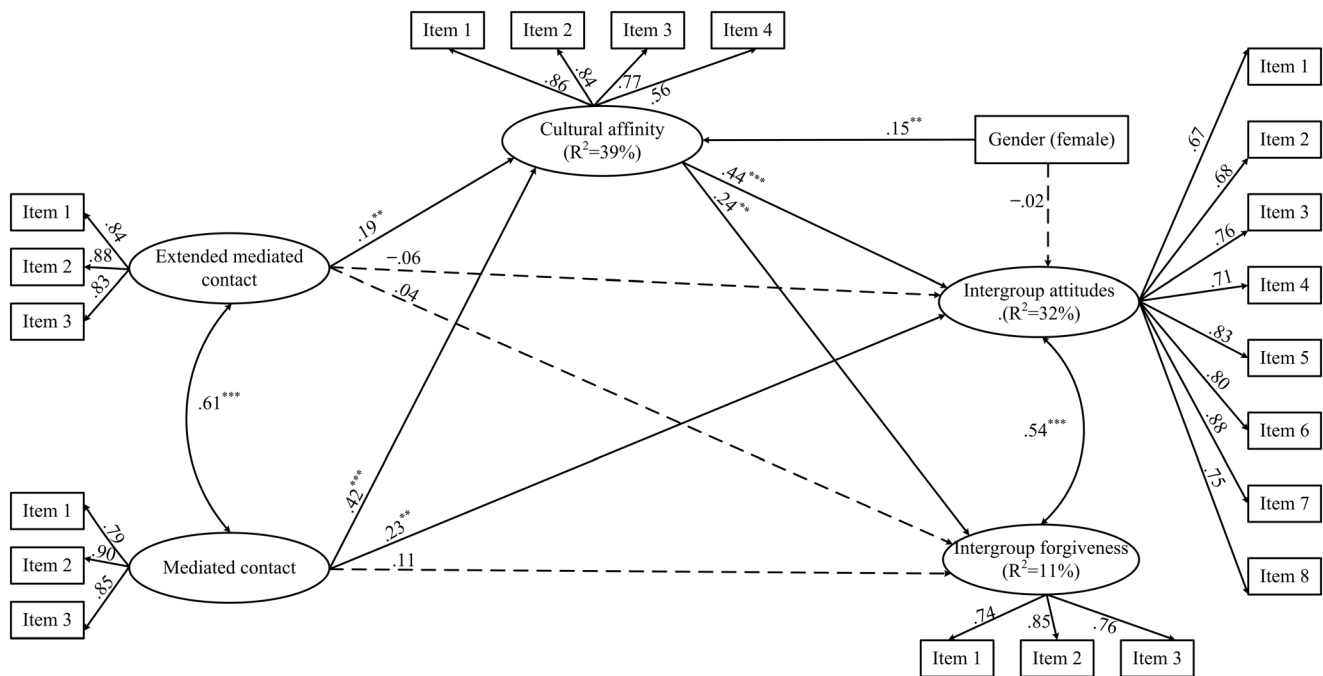


Fig. 2 Results of testing the structural model ** $p < .01$, *** $p < .001$. The solid lines indicate significant paths; The dotted lines indicate non-significant paths

affinity (0.46 vs. 0.23), intergroup attitudes (0.26 vs. 0.01), and intergroup forgiveness (0.17 vs. 0.08) than extended mediated contact.

Mediation Effects of Cultural Affinity

As suggested by statistical scholars (Cheung and Lau 2007), bootstrapping method in SEM can provide accurate and robust estimation of the significance of indirect effects. Specifically, if 95% confidence intervals (CI), generated from bootstrapping results, did not include zero, we can draw the conclusion that the indirect effect is statistically significant (Cheung and Lau 2007; Shrout and Bolger 2002).

We estimated mediating effects of cultural affinity, based on 5000 bootstrap samples. The results revealed that indirect effects of mediated contact on both intergroup attitudes (95% CI [0.065, 0.196], $p < 0.05$) and intergroup forgiveness (95% CI [0.024, 0.180], $p < 0.05$) were significant, showing that cultural affinity functioned as a mediator. Thus, H4 was supported. In addition, as the direct path from mediated contact to intergroup attitudes was still significant ($\beta = 0.23$, $p = 0.003$) (see Fig. 2), cultural affinity partially mediated this relationship. Cultural affinity was a full mediator between mediated contact and intergroup forgiveness. Regarding extended mediated contact, its indirect effects on intergroup attitudes (95% CI [0.014, 0.119], $p < 0.05$) and intergroup forgiveness (95% CI [0.006, 0.109], $p < 0.05$) were significant, supporting H5.

Table 3 Direct, indirect and total standardized effects of exogenous variables on endogenous variables

	Direct effects			Indirect effects			Total effects		
	CA	IA	IF	CA	IA	IF	CA	IA	IF
Mediated contact	0.46 (0.28, 0.66)	0.14 (0.54, 0.24)	0.09 (-0.09, 0.26)	–	0.12 (0.07, 0.20)	0.08 (0.28, 0.66)	0.46 (0.28, 0.66)	0.26 (0.17, 0.37)	0.17 (0.02, 0.32)
Extended mediated contact	0.23 (0.04, 0.41)	-0.05 (-0.14, 0.05)	0.03 (-0.13, 0.20)	–	0.06 (0.01, 0.12)	0.04 (0.01, 0.11)	0.23 (0.04, 0.41)	0.01 (-0.10, 0.12)	0.08 (-0.10, 0.24)
CA	–	0.26 (0.16, 0.35)	0.18 (0.04, 0.32)	–	–	–	–	0.26 (0.16, 0.35)	0.18 (0.04, 0.32)

CA = Cultural affinity; IA = Intergroup attitudes; IF = Intergroup forgiveness; 95% CI were shown in the parentheses

Moreover, cultural affinity fully mediated their relationships since the direct paths from extended mediated contact to the both outcome variables were not significant.

Discussion

The present study introduced the novel contact form (i.e. extended mediated contact) as being more indirect than mediated contact, and simultaneously examined functional roles of the two contact forms in predicting cultural affinity, intergroup attitudes, and intergroup forgiveness. Findings from the SEM analysis revealed that extended mediated contact had a direct relationship with cultural affinity and indirect relationships with intergroup attitudes and forgiveness, though these relationships were weaker than those of mediated contact. The mediation test further revealed that the affective variable of cultural affinity mediated the relationships of mediated and extended mediated contact to intergroup attitudes and forgiveness.

Functional Roles of Mediated Contact

First, our finding indicated that Chinese students' viewing South Korean TV series or films was positively related to their liking for South Korean cultures. Despite South Korea and China sharing some traditional Confucian values and norms, their cultures display enormous differences and are becoming more heterogeneous (Yoo et al. 2014). These entertainment programs often contain positive portrayals of South Koreans and transmit their cultural practices and traditions, which may have evoked affective responses (e.g. cultural affinity) of Chinese students who viewed the programs. As argued by Kim and Richardson (2003), the more frequently people from a specific country have media exposures to a foreign country, the more likely they perceive the country and its cultures in a positive light.

Second, in line with prior research (e.g. Lienemann and Stopp 2013; Shim et al. 2012; Wojcieszak and Azrout 2016), the positive association between mediated contact and intergroup attitudes was confirmed in our study. In contrast, the relationship between mediated contact and intergroup forgiveness is insufficiently examined. Our findings showed that mediated contact can also play a role in promoting intergroup forgiveness using a sample recently experiencing conflicts with an outgroup, which can be important because tension and hostility tend to remain persistent even after a conflict ends (Stephan and Stephan 2000). These results provided support for the application of the contact hypothesis (Allport 1954) to the mediated contexts. As argued by Anastasio et al. (1994), prejudice and negative attitudes largely result from a mistaken or incomplete understanding of an outgroup, and through intergroup contact one can gain more

knowledge about sociocultural and behavioral norms of this outgroup. In social settings where direct contact is limited, the mediated contact can function as an effective compensating strategy to better understand the outgroup (Vincze and Harwood 2013). The increased information and knowledge can evoke cognitive and affective responses that lead to enhanced intergroup attitudes and post-conflict forgiveness (Rupar and Graf 2019).

Third, this study further extended our understanding of the mechanisms underlying the relationship between mediated contact and intergroup relations by incorporating the mediating variable of cultural affinity. The confirmed mediating effects of cultural affinity revealed the complexity in these relationships. Specifically, cultural affinity fully mediated the mediated contact-intergroup forgiveness relationship, but partially mediated the mediated contact-intergroup attitudes relationship. The partial mediation may imply that this relationship can be more complex than we originally expected, suggesting other variables (e.g. intercultural understanding) may play extra mediating roles.

These findings can present important implications for intergroup relations damaged by conflicts. Opportunities for direct intergroup contact are often scarce, particularly in post-conflict settings (Dhont and Van Hiel 2011). For instance, most Chinese tourists cancelled their trips to South Korea during and after the THAAD incident (Bi 2017). Even the effectiveness of extended contact is limited in post-conflict societies in that it involves sharing direct contact experiences (Rupar and Graf 2019). In contrast, big advantages of mediated contact are that it is completely not contingent on direct contact experiences, and can be a cost-effective and easily implemented strategy due to the popularity and widespread use of Internet and social media. Conflicts occasionally arise among different ethnic groups in the current era featured by globalization and multi-cultural societies. Therefore, TV series and films containing positive portrayals of the target outgroup can be fully and wisely utilized to promote mutual reconciliation.

Functional Roles of Extended Mediated Contact

Theoretically inspired by the extended contact hypothesis (Wright et al. 1997), we proposed a novel type of intergroup contact (i.e. extended mediated contact). This contact form does not require personal involvement in mediated contact, featured by merely knowing and observing in-group members' viewing of outgroup entertainment programs. Functioning similarly to mediated contact, extended mediated contact was revealed to be indirectly related to intergroup attitudes and post-conflict forgiveness via the mediator of cultural affinity. Moreover, the relationships between extended mediated contact and the two outcome variables were completely transmitted by the proposed mediator of cultural

affinity. As discussed previously, frequent exposures to outgroup media programs can contribute to the viewers' better understanding of and enhanced attitudes toward the outgroup. The cognitive and affective shifts may arouse the viewers' intentions to disseminate the learned information and knowledge about the outgroup among their close in-group members, according to the two-step flow theory in mass communication research (Katz and Lazarsfeld 1955). In this sense, investigating extended mediated contact can provide the theoretical implication that viewing outgroup media programs can have much wider impact beyond the viewers. This investigation may be particularly important for individuals who do not show personal interest in outgroup media programs or for whom such programs are not available due to lack of leisure time.

Extended mediated contact is a more indirect contact form than mediated contact because the former does not require personal engagement in mediated contact. Also noteworthy is that our results indicated that mediated contact exerted stronger total effects on cultural affinity, intergroup attitudes and post-conflict forgiveness than extended mediated contact (see Table 3). This finding echoes the argument that the more indirect the intergroup contact is, the weaker effect it may have on intergroup relations (Dhont and Van Hiel 2011).

As investigating extended mediated contact is rather exploratory in nature, future studies are encouraged to continue this research line to further enrich our understanding of its functional roles. Besides, mediated contact includes but is not limited to media exposure to TV series and films, involving other parasocial contact behaviors such as contact through newspaper and TV news. We agree with Visintin et al. (2017) who recommend distinguishing between news media and entertainment media. Therefore, future research may further differentiate effects of different types of media when examining mediated and extended mediated contact.

Limitations and Conclusion

Several limitations of this study need to be acknowledged. First, due to the cross-sectional research design, the results cannot be inferred as causal relations. Future research is recommended to use the mixed methods design to further validate and extend our findings. For instance, quantitative data can be collected to examine effects of personal and close in-group members' viewing foreign TV series and films on various manifestations of intergroup relations (e.g. intergroup trust, intergroup empathy, and perceived prejudice). Qualitative data can be collected to gain the nuanced understanding of the ways the viewing experiences reshape their perceptions of outgroup members and their cultures. Second, we tested the hypotheses by sampling Chinese university students. As such, it requires caution to generalize the present

results to other sample groups unless they are replicated in those sample groups. Third, the sampling method might have a bias for using a social media though it is very popular in China and used by most of Chinese citizens.

In conclusion, the contributions of the present study to the intergroup contact literature are mainly two-fold. First, we proposed a novel form of contact (i.e. extended mediated contact) and revealed it as a positive predictor of intergroup relations. Its relationships with intergroup attitudes and forgiveness were examined and differentiated with those of mediated contact. The results revealed that extended mediated contact had significant but weaker relationships with the outcome variables than mediated contact. Second, the affective variable of cultural affinity was revealed as a mediator in the above-mentioned relationships, which has enriched our understanding of functioning mechanisms of how intergroup contact can be related to intergroup relations.

Funding The study is funded by the Humanities and Social Sciences Project of the Ministry of Education of China (Grant Number: 18YJC740063) and Social Sciences Funding Project of Jilin Province, China (Grant Number: 2019B168).

Compliance with Ethical Standards

Conflict of Interest No potential conflict of interest was reported by the authors.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

Informed Consent Informed consent was obtained from all individual participants included in the study.

References

- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Anastasio, P. A., Rust, M. C., Dovidio, J. F., & Bachman, B. A. (1994). The contact hypothesis. *Small Group Research*, 25(2), 224–249. <https://doi.org/10.1177/1046496494252005>.
- Antonucci, T. C., Ajrouch, K. J., Webster, N. J., & Birditt, K. S. (2018). Social networks and forgiveness: The role of trust and efficacy. *Research in Human Development*, 15(1), 3–20. <https://doi.org/10.1080/15427609.2017.1415093>.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>.
- Bandura, A. (2002). Social cognitive theory of mass communication. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed., pp. 121–153). Hillsdale NJ: Lawrence Erlbaum Associates, Inc..
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic,

- and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>.
- Bi, Y. D. (2017). Sino-ROK relations under the shadow of THAAD. *Contemporary Korea*, 4, 37–48 (in Chinese).
- Bilali, R., Vollhardt, J. R., & Rarick, J. R. D. (2017). Modeling collective action through media to promote social change and positive intergroup relations in violent conflicts. *Journal of Experimental Social Psychology*, 68, 200–211. <https://doi.org/10.1016/j.jesp.2016.07.005>.
- Brannon, T. N., & Walton, G. M. (2013). Enacting cultural interests: How intergroup contact reduces prejudice by sparking interest in an outgroup's culture. *Psychological Science*, 24(10), 1947–1957. <https://doi.org/10.1177/0956797613481607>.
- Byrne, B. (2010). *Structural equation modeling with AMOS. Basic concepts, applications, and programming*. New York: Routledge.
- Cao, C., Zhu, C., & Meng, Q. (2017). Predicting Chinese international students' acculturation strategies from socio-demographic variables and social ties. *Asian Journal of Social Psychology*, 20(2), 85–96. <https://doi.org/10.1111/ajsp.12171>.
- Cao, C., Meng, Q., & Shang, L. (2018). How can Chinese international students' host-national contact contribute to social connectedness, social support and reduced prejudice in the mainstream society? Testing a moderated mediation model. *International Journal of Intercultural Relations*, 63, 43–52. <https://doi.org/10.1016/j.ijintrel.2017.12.002>.
- Chen, R. (2013). A critical analysis of the U.S. “pivot” toward the Asia-Pacific: How realistic is neo-realism? *Connections: The Quarterly Journal*, 12(3), 39–62. <https://doi.org/10.11610/Connections.12.3.03>.
- Cheung, G. W., & Lau, R. S. (2007). Testing mediation and suppression effects of latent variables: Bootstrapping with structural equation models. *Organizational Research Methods*, 11, 296–325. <https://doi.org/10.1177/1094428107300343>.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Mahwah: Lawrence Erlbaum Associates.
- Chung, J. H., & Choi, M. (2013). Uncertain allies or uncomfortable neighbors? Making sense of China-North Korea relations, 1949–2010. *The Pacific Review*, 26(3), 243–264. <https://doi.org/10.1080/09512748.2012.759262>.
- Dhont, K., & Van Hiel, A. (2011). Direct contact and authoritarianism as moderators between extended contact and reduced prejudice: Lower threat and greater trust as mediators. *Group Processes & Intergroup Relations*, 14(2), 223–237. <https://doi.org/10.1177/1368430210391121>.
- Eyal, K., & Dailey, R. M. (2012). Examining relational maintenance in parasocial relationships. *Mass Communication and Society*, 15(5), 758–781. <https://doi.org/10.1080/15205436.2011.616276>.
- Fourie, J., & Santana-Gallego, M. (2013). Ethnic Reunion and cultural affinity. *Tourism Management*, 36, 411–420. <https://doi.org/10.1016/j.tourman.2012.10.002>.
- Gan, C., & Li, H. (2018). Understanding the effects of gratifications on the continuance intention to use WeChat in China: A perspective on uses and gratifications. *Computers in Human Behavior*, 78, 306–315.
- Hamer, K., Penczek, M., & Bilewicz, M. (2017). “Humanum ignoscere Est”. The relationship of national and supranational identifications with intergroup forgiveness. *Personality and Individual Differences*, 105, 257–263. <https://doi.org/10.1016/j.paid.2016.09.058>.
- Hayward, L. E., Tropp, L. R., Hornsey, M. J., & Barlow, F. K. (2017). Toward a comprehensive understanding of intergroup contact: Descriptions and mediators of positive and negative contact among majority and minority groups. *Personality and Social Psychology Bulletin*, 43(3), 347–364. <https://doi.org/10.1177/0146167216685291>.
- Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the “contact hypothesis”. In M. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1–44). Oxford, UK: Blackwell.
- Jiang, W. (2017). Investigating the success of “descendants of the sun” in China. *Journal of News research*, 8(17), 31–32 (in Chinese).
- Joyce, N., & Harwood, J. (2014). Improving intergroup attitudes through televised vicarious intergroup contact: Social cognitive processing of ingroup and outgroup information. *Communication Research*, 41(5), 627–643. <https://doi.org/10.1177/0093650212447944>.
- Kang, J. Q. (2017). Effects of Korean TV series on Chinese university students' views of love. *Lao Qu Jian She*, 20, 73–77 (in Chinese).
- Katz, E., & Lazarsfeld, P. (1955). *Personal influence*. New York: Free Press.
- Kim, E., & Cha, V. D. (2016). Between a rock and a hard place: South Korea's strategic dilemmas with China and the United States. *Asia Policy*, 21(1), 101–121. <https://doi.org/10.1353/asp.2016.0016>.
- Kim, H., & Heo, U. (2016). What affects Korea-US relations? *Pacific Focus*, 31(1), 31–55. <https://doi.org/10.1111/pafo.12064>.
- Kim, H., & Richardson, S. L. (2003). Motion picture impacts on destination images. *Annals of Tourism Research*, 30(1), 216–237. [https://doi.org/10.1016/S0160-7383\(02\)00062-2](https://doi.org/10.1016/S0160-7383(02)00062-2).
- Lam, V. L., & Katona, Z. (2018). National and supranational identities and ingroup-outgroup attitudes of Hungarian adolescents. *European Journal of Developmental Psychology*, 15(1), 115–130. <https://doi.org/10.1080/17405629.2017.1333421>.
- Lienemann, B. A., & Stopp, H. T. (2013). The association between media exposure of interracial relationships and attitudes toward interracial relationships. *Journal of Applied Social Psychology*, 43, E398–E415. <https://doi.org/10.1111/jasp.12037>.
- Meng, Q., Zhu, C., & Cao, C. (2017). An exploratory study of Chinese University Undergraduates' global competence: Effects of internationalisation at home and motivation. *Higher Education Quarterly*, 71(2), 159–181. <https://doi.org/10.1111/hequ.12119>.
- Ortiz, M., & Harwood, J. (2007). A social cognitive theory approach to the effects of mediated intergroup contact on intergroup attitudes. *Journal of Broadcasting & Electronic Media*, 51(4), 615–631.
- Pagotto, L., & Voci, A. (2013). Direct and mass-mediated contact: The role of different intergroup emotions. *TPM: Testing, Psychometrics, Methodology in Applied Psychology*, 20(4), 365–381. <https://doi.org/10.4473/TPM20.4.5>.
- Paluck, E. L., & Green, D. P. (2009). Deference, dissent, and dispute resolution: An experimental intervention using mass media to change norms and behavior in Rwanda. *The American Political Science Review*, 103, 622–644. <https://doi.org/10.1017/S0003055409990128>.
- Park, S. (2005). The impact of media use and cultural exposure on the mutual perception of Koreans and Japanese. *Asian Journal of Communication*, 15(2), 173–187. <https://doi.org/10.1080/01292980500118755>.
- Park, S. Y. (2012). Mediated intergroup contact: Concept explication, synthesis, and application. *Mass Communication and Society*, 15(1), 136–159. <https://doi.org/10.1080/15205436.2011.558804>.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.
- Rupar, M., & Graf, S. (2019). Different forms of intergroup contact with former adversary are linked to distinct reconciliatory acts through symbolic and realistic threat. *Journal of Applied Social Psychology*, 49(2), 63–74. <https://doi.org/10.1111/jasp.12565>.
- Samovar, L., Porter, R., & McDenial, E. R. (2009). *Communication between cultures* (7th edn.). Belmont, CA: Wadsworth.

- Schiappa, E., Gregg, P. B., & Hewes, D. E. (2005). The parasocial contact hypothesis. *Communication Monographs*, 72(1), 92–115. <https://doi.org/10.1080/0363775052000342544>.
- Shim, C., Zhang, Y. B., & Harwood, J. (2012). Direct and mediated intercultural contact: Koreans' attitudes toward US Americans. *Journal of International and Intercultural Communication*, 5(3), 169–188. <https://doi.org/10.1080/17513057.2012.670715>.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422–445. <https://doi.org/10.1037/1082-989X.7.4.422>.
- Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 23–46). Hillsdale, NJ: Erlbaum.
- Strelan, P., & Lawani, A. (2010). Muslim and westerner responses to terrorism: The influence of group identity on attitudes toward forgiveness and reconciliation. *Peace and Conflict: Journal of Peace Psychology*, 16(1), 59–79. <https://doi.org/10.1080/10781910903485294>.
- Sun, R. (2017). An interpretation of Chinese reaction to the THAAD incident. *Contemporary International Relations*, 4, 3–6 (in Chinese).
- Swaine, M. (2017). Chinese views on South Korea's deployment of THAAD. *China Leadership Monitor*, 52(4), 1–15.
- Swickert, R., Robertson, S., & Baird, D. (2016). Age moderates the mediational role of empathy in the association between gender and forgiveness. *Current Psychology*, 35(3), 354–360. <https://doi.org/10.1007/s12144-014-9300-z>.
- Swift, J. S. (1999). Cultural closeness as a facet of cultural affinity: A contribution to the theory of psychic distance. *International Marketing Review*, 16(3), 182–201. <https://doi.org/10.1108/02651339910274684>.
- Tam, T., Hewstone, M., Kenworthy, J. B., Cairns, E., Marinetti, C., Geddes, L., & Parkinson, B. (2008). Postconflict reconciliation: Intergroup forgiveness and implicit biases in Northern Ireland. *Journal of Social Issues*, 64(2), 303–320. <https://doi.org/10.1111/j.1540-4560.2008.00563.x>.
- Vincze, L., & Harwood, J. (2013). Improving intergroup attitudes via mediated intergroup contact in a bilingual setting. *Multilingua*, 32(3), 405–421. <https://doi.org/10.1515/multi-2013-0018>.
- Visintin, E. P., Voci, A., Pagotto, L., & Hewstone, M. (2017). Direct, extended, and mass-mediated contact with immigrants in Italy: Their associations with emotions, prejudice, and humanity perceptions. *Journal of Applied Social Psychology*, 47(4), 175–194. <https://doi.org/10.1111/jasp.12423>.
- Voci, A., Hadziosmanovic, E., Cakal, H., Veneziani, C. A., & Hewstone, M. (2017). Impact of pre-war and post-war intergroup contact on intergroup relations and mental health: Evidence from a Bosnian sample. *Peace and Conflict: Journal of Peace Psychology*, 23(3), 250–259. <https://doi.org/10.1037/pac0000222>.
- Wojcieszak, M., & Azrout, R. (2016). I saw you in the news: Mediated and direct intergroup contact improve outgroup attitudes. *Journal of Communication*, 66(6), 1032–1060. <https://doi.org/10.1111/jcom.12266>.
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73(1), 73–90. <https://doi.org/10.1037/0022-3514.73.1.73>.
- Yoo, J. W., Jo, S., & Jung, J. (2014). The effects of television viewing, cultural proximity, and ethnocentrism on country image. *Social Behavior and Personality: An International Journal*, 42(1), 89–96. <https://doi.org/10.2224/sbp.2014.42.1.89>.
- Zagefka, H., & Brown, R. (2002). The relationship between acculturation strategies, relative fit and intergroup relations: Immigrant-majority relations in Germany. *European Journal of Social Psychology*, 32(2), 171–188. <https://doi.org/10.1002/ejsp.73>.
- Zhang, L., & Xu, Y. (2007). A study on college students' states of viewing Korea trendy, identification with Korea culture and their relations. *China Journal of Health Psychology*, 15(12), 1057–1058.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.