The Contact Hypothesis Reconsidered: Interacting via the Internet

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One of the leading theories advocated for reducing intergroup conflict is the contact hypothesis. According to this theory, contact under certain conditions, such as equal status, cooperation towards a superordinate goal, and institutional support, will create a positive intergroup encounter, which, in turn, will bring about an improvement in intergroup relations. Despite its promise, the contact hypothesis appears to suffer from three major defects: (1) practicality—creating a contact situation involves overcoming some serious practical obstacles; (2) anxiety—the anxiety felt by the participants may cause a contact to be unsuccessful or at least not reach its potential; (3) generalization—the results of a contact, however sucessful, tend to to be limited to the context of the meeting and to the participants. The Internet has, in recent years, become an accessible and important medium of communication. The Internet creates a protected environment for users where they have more control over the communication process. This article suggests that the Internet's unique qualities may help in the creation of positive contact between rival groups. The major benefits of using the Internet for contact are examined in this article.

The Contact Hypothesis Reconsidered: Interacting via Internet

The contact hypothesis has been described as one of the most successful ideas in the history of social psychology (Brown, 2000). Allport (1954) presented the first widely-accepted outline of the contact hypothesis, claiming that true acquaintance lessens prejudice. In other words, knowledge, on its own, will not cause people to negate their prejudices and stereotypes about others, since they are very likely to accept only those pieces of information that fit into their preconceived schema of the world. It is through getting to know the other that people may be able to break down their stereotypes of him or her.

The Internet has, to date, been perhaps the most successful means of facilitating and enabling contact among individuals—particularly those who otherwise would not have had the opportunity, nor perhaps the inclination, to meet (McKenna & Bargh, 2000). As we will argue here, the Internet is uniquely suited to the implementation of the various requirements of the contact hypothesis that are necessary for consistently producing successful outcomes. Indeed, the Internet may be the best tool yet for effectively putting the contact hypothesis into practice.

The article begins with a brief overview of the requirements necessary to create an ideal and successful contact situation and the challenges to putting these requirements into practice in traditional settings. We then discuss the ways in which the Internet can be used to meet these challenges and, in some areas, do so more successfully than can be achieved through traditional interaction contexts (e.g., in person, over the phone). We conclude with a short section providing ideas for how various aspects of the online contact environment and interaction process can be tweaked to fit specific situational needs and to improve the chances for a successful contact to occur.

Conditions and Challenges of the Contact Hypothesis

Under ideal circumstances, when a member of a majority group meets with a minority group member and the experience is a positive one, an attitude change on two levels will result (Allport, 1954). First, there will be an attitude change that is target-specific. That is, initial assumptions about the other that arise from the (negative) stereotypes associated with his or her group are replaced by more positive perceptions of the individual. Second, these new positive associations with the individual will become extended to that individual's group as a whole, thus ameliorating negative attitudes toward the group. Allport delineated four key conditions for such a meeting: equal-group status within the situation; common goals; intergroup cooperation; and institutional support. Several other conditions were later added, the most important of these being voluntary participation and intimate contact (Amir, 1969, 1976).

There is strong empirical support demonstrating that, when effectively implemented, the conditions described above do indeed lead to a positive attitude change that is target-specific (e.g., Brown & Wade, 1987; Hewstone & Brown, 1986; Riordan & Ruggiero, 1980). The evidence is less clear regarding a global attitude change toward the group, however. A majority of studies do not find that the positive attitude toward the individual translates into a more positive attitude toward the group nor into more positive behavior toward other individual group members (see Hewstone & Brown, 1986 for a review). Scarberry, Ratcliff, Lord, Lanicek and Desforges (1997) demonstrate that a global attitude change can be consistently achieved, however, under carefully controlled conditions.

The contact hypothesis contains a long list of conditions for a sucessful contact. However, Pettigrew and Tropp (2000), in their meta-analysis of contact studies, have

found that it is not necessary that *all* of Allport's (1954) conditions be present simultaneously for bias to be reduced. Mere contact can be a sufficient condition for bias reduction that is lasting and generalizes beyond the individuals to their larger group. Importantly, however, each of Allport's conditions further enhances the bias-reducing effects of mere contact and thus the more conditions that are co-present, the more likely a successful and lasting outcome will be achieved.

Unfortunately, there are significant barriers to meeting many of the conditions and, indeed, even to arranging for a "mere contact" to take place. This, in turn, limits the number of contacts that actually take place. The major challenges are: (1) The practicality issue: Contact between rival groups according to the conditions required by the contact hypothesis might be very complicated to arrange and expensive to run. (2) Anxiety: Despite the fact that participation in a contact is voluntary, the high anxiety involved in the contact situation may hinder its success. (3) Generalization: How can a generalization be created from a specific contact with certain outgroup members to the outgroup as a whole? We turn to a more detailed discussions of these difficulties below.

Practicality and Contact

Organizing a meeting among members of opposing groups raises both logistical and financial issues. Groups that are segregated and/or geographically distant from each other will be harder to bring together and any meeting will be more costly. Even when the different groups are geographically close, linking them may still prove an expensive undertaking. Joint holiday plans for Catholic and Protestant children in Northern Ireland are one such example (Trew, 1986). As the undertaking becomes more expensive, the chances of it taking place decline. In addition, there may be barriers of language or of status. Language barriers may cause feelings of distance, misunderstanding, and miscommunication among the different groups. The issue of equal status is also problematic; in some cases rival groups are characterized by extreme status differences (Pettigrew, 1971).

Anxiety in Contact

Intergroup interactions are often more anxiety-provoking than interpersonal ones and such anxiety may not be conducive to harmonious social relations (Islam & Hewstone, 1993; Stephan & Stephan, 1985; Wilder, 1993). Intergroup anxiety is the result of anticipation of negative reactions during the intergroup encounter (Stephan & Cookie, 2001; Stephan & Stephan, 1996). When an individual is anxious, he or she is more likely to use heuristics. Thus, if an intergroup contact produces significant levels of anxiety in the individual or individuals involved, he or she is more likely to apply stereotypes to the outgroup (Bodenhausen, 1990; Bodenhausen & Wyer, 1985).

Wilder (1993) pointed out that when in a state of anxiety, group members are likely to ignore any disconfirming information supplied in the contact context. Under such conditions, as Wilder and Shapiro (1989) demonstrated, when a member of the outgroup behaves in a positive manner that contradicts the expectations of the other side, members of the ingroup do not alter their opinions and recall the outgroup as behaving in a manner consistent with the stereotype. In such a case, the contact between these members is unlikely to bring about any change in the group stereotype.

Generalization from Contact

One of the greatest challenges to the contact hypothesis is the issue of whether or not the results of a positive contact with a member of the outgroup will be generalized further. Group saliency during the interaction appears to be of critical importance to successful generalization. However, there is much debate among researchers as to what level that salience should be. Hewstone and Brown (1986) argued that a general contact is likely to be perceived on the interpersonal level and therefore not have any impact on the intergroup level. In other words, if the individual is perceived only as an individual rather than also as a representative member of his or her group, then any attitude change will remain target-specific. They suggested that, for a positive contact to have a wider group-level impact, individual participants need to be seen as representatives of their group so that the (out)group identity is highly salient. Conversely, Brewer and Miller (1984) among others have suggested that in order for a contact to succeed, group saliency should be low.

Hamburger (1994) suggested that when the central tendency of the stereotype is the only component to be measured, a large part of the picture is ignored. He added that this component may be the most resistant to change. Thus, negative results of group generalization based solely on central tendency measures may lead to erroneous conclusions regarding the contact theory in general. The inclusion of more sensitive measurements, such as variability, will give a more accurate picture, as well as allow an investigation into the background processes. Several recent studies have demonstrated Hamburger's suggestion that the central tendency is likely to be the more rigid component in the stereotype (Garcia-Marques & Mackie, 1999; Hewstone & Hamberger, 2000).

Clearly, when all the necessary ingredients are present, positive and beneficial results may be obtained, but just as clearly, "getting the recipe right" to produce such an outcome may be difficult at best under traditional circumstances. Yet the major literature dealing with the contact hypothesis (for a review see Brown & Hewstone, 2005) fails to take into account the potential role of the Internet in helping towards the success of an intergroup contact. Below we examine the ways in which contact over the Internet may overcome the practical difficulties inherent in the creation of a face-to-face contact situation according to the conditions set out in the contact hypothesis.

The Net Advantage

Internet Contact and Practicality

Leveling the Field

The contact hypothesis requires that there should be equal status between the members of both groups taking part in the contact. According to McClendon (1974), equal status increases the likelihood for perceived similarities between the groups and so enhances the likelihood for improvement in their relationship and in the reduction of stereotypes (Pettigrew, 1971). Optimally, there should be both external equal status (in real life) and internal equal status (within the contact) between the people taking part in the encounter. In face-to-face encounters, even very subtle differences in manner of dress, body language, use of personal space, and the seating positions taken in the room can belie real (or perceived) status differences. As Hogg (1993) has shown, within group interactions people tend to be highly sensitive in discerning subtle cues that may be indicative of status. Online interactions have the advantage here because many, although not all, of the cues individuals typically rely on to gauge the internal and external status of others are not typically in evidence.

For instance, when contact takes place in text-based environments on the Internet, regular status symbols are not part of the interaction; "on the Internet no one knows that I am wearing a diamond necklace or have teeth missing." This point is particularly pertinent with regard to face-to-face contact, where organizers may have gone to extraordinary lengths to ensure that all participants are of equal status only to have one arrive with a Rolex watch or a similarly inappropriate status symbol.

Even when status differences are known, electronic interaction tends to ameliorate some of the effects of status differentials. For instance, when bringing together members of two established groups, the members are likely to be well aware of the internal pecking order within their own group even if they do not have knowledge of the established hierarchy among the other group's members. In face-to-face interactions such distinctions within the groups often quickly become apparent to all, as those who stand lower tend to speak up less often and, in ways both obvious and subtle, give deference to those with higher status within their group.

Such is not the case in electronic interactions. One aspect of electronic communications that has long been decried (e.g., Sproull & Kiesler, 1991) is the tendency, within organizational settings, for there to be a reduction in the usual inhibitions that typically operate when interacting with one's superiors. In other words, existing internal status does not carry as much weight and does not affect the behavior of the group members to such an extent. Underlings are more likely to speak up, to speak "out of turn," and to speak their mind. Thus electronic interaction makes power less of an issue during discussion which leads group members, regardless of status, to contribute more to the discussion (Spears, Postmes, Lea, & Wolbert, 2002). While this can prove to be problematic within a corporate setting, it is advantageous in the

present context, as the medium serves to reduce the constraining effects of status both within and between the two groups.

Connecting from Afar and with the Comforts of Home

As noted above, organizers may face significant difficulties in arranging a meeting among individuals and groups when it comes to finding a suitable meeting place, transporting the participants involved, and compensating participants for lost time due to travel incurred. This is particularly true when the groups in question or their various members live at some distance from one another. Participation may be limited to only those members of the groups who have the financial resources and job flexibility to enable their attendance or those who live in close proximity to the meeting site, rather than to all members who have the inclination (but not the resources) to attend. Thus the size and number of contacts possible are severely restricted when such meetings are face-to-face affairs.

The advent of computer-mediated interaction has opened the doors to connection possibilities that were previously not feasible. Time differences and physical distance are no longer obstacles to bringing people "together," at least in the developed countries of the world. Electronic meetings are neither costly to set up nor are they time consuming for the participants. All that is required is for the participants to log onto the Internet and into the virtual meeting space at the specified day and time from an office, public library, or a home computer.

Indeed, having participants engage in the contact from the privacy of their respective homes has distinct advantages. Participants are likely to feel more comfortable and less anxious in their familiar surroundings. Further, research has shown that public, as opposed to private, settings can exacerbate the activation and use of stereotypes, especially when it comes to those tied to racial prejudice (e.g., Lambert, Payne, et al., 2003). As Zajonc (1965) has shown, an individual's habitual or dominant response is more likely to emerge in public settings, whereas the individual is likely to be more open and receptive to altering the habitual response when in a private sphere. Even when participants interact in quite "public" electronic venues but do so from the privacy of their homes, they tend to feel that it is a private affair (e.g., McKenna & Bargh, 2000; McKenna, Green, & Gleason, 2002). Thus, interacting electronically from home should serve to inhibit the activation of stereotypes as compared to a more public and face-to-face setting in a new environment.

Cooperation Toward Superordinate Goals

One of the keys to a successful contact is for both sides to participate jointly in a task, the completion of which is important to both groups (Allport, 1954; Miller & Harrington, 1992). This is especially true when cooperation between the groups will lead to successful outcomes (Blanchard, Adelman, & Cook, 1975). The question then arises as to whether such an exercise may be successfully undertaken on the Internet and, if so, will the results equal or surpass those conducted in traditonal, face-to-face environments?

Today many organizations do in fact have working teams whose members are dispersed all around the world and who frequently communicate, cooperate, and complete tasks through the Internet. Successful outcomes routinely occur despite the fact that, in many cases, the team members have never met one another and are unlikely to do so. This phenomenon is known as a virtual team. This form of working is becoming increasingly common within organizations, as the benefits of including virtual teams have become more evident (Cascio, 2000). For instance, employers find that telecommuting increases worker productivity and improves attendance (Abreu, 2000).

To date, the evidence seems to indicate that tasks performed by virtual teams are done equally well (or equally badly) as those conducted by face-to-face work teams. Research by Dennis (1996; Dennis & Kinney, 1998) has shown that members of verbally-interacting workgroups tend to share less vital information than do members of electronic workgroups, and hence make poor decisions. Yet, members of the electronic groups also tend to make poor group decisions, despite exchanging 50% more of the vital information needed to make an optimal decision. Galegher and Kraut (1994) also found that for virtual work groups the final product was similar in overall quality to that produced by face-to-face group members.

Institutional Support and Willingness to Participate

One of the preconditions for a contact is that participants from both sides receive institutional support (Allport, 1954; Slavin, 1985). This is to try to ensure that the contact will have a positive influence on the wider groups represented there. This is particularly important when the differences between the groups are deep-seated or potentially explosive. In such a case, a leader might resent sending group representatives to a meeting with the outgroup and may be concerned that such a meeting would diminish his or her standing as a leader.

A related condition is that the members from both sides take part in the meeting on their own volition. If the organization has compelled its members to take part in the meeting, they are unlikely to change their stereotypes as a negative reaction to the feelings of loss of control over their freedom of association (Stephan & Stephan, 1996).

Internet contact may provide a balm to some of these issues. Participating in an Internet contact may be seen as taking on less of a risk than a face-to-face contact (Bargh & McKenna, 2004; McKenna & Bargh, 1998) and this may make it easier for group members to volunteer to participate and for leaders to support such a meeting.

Bridging the Language Barrier

One issue that arises when coordinating meetings among groups with different native tongues is that of communication. Generally, participants need to be selected who either can communicate through a common language—often one that is native to neither group (i.e., English)—or translators must be provided, which can be costly. Bringing in individuals to provide translation assistance can be problematic

for other reasons, as well. For instance, there is the danger that attention will focus on the person doing the translation and not on the individual members whose opinions he or she is expressing. This can reduce the perception of the target both as an individual and as a representative member of his or her group.

Emerging software, however, will soon allow individuals interacting through a text-based environment to receive messages in their own language even though those messages were created in another. There are already a number of text translation tools currently available for use on the Internet. None have yet reached the point of refinement and accuracy needed for a successful exchange of ideas with all the nuances, but the translation programs are improving by leaps and bounds (e.g., Climent, Moré, Oliver, Salvatierra, Taulé, Sanchez, & Vallmanya, 2003; Coughlin, 2001). It will not be long before we can all speak "your" language and you can speak "ours." This will allow for the removal of a (human) third party translator to obvious advantage and, because communication will take place in each party's "own" language, feelings of similarity and kinship should be enhanced.

Thus, in terms of sheer practicality, there are some distinct advantages to conducting contact interactions over the Internet. Participants can readily take part from disparate locales and do so from a position of greater comfort and security than can be obtained in face-to-face meetings. Many of the most obvious status "give-aways" are not in evidence in text-based online interactions. When the status of a member is known, the nature of the communication medium tends to ameliorate the negative influence and effects that status can have on an interaction. Cooperative tasks can be conducted just as well online as they could were the participants to undertake them in person and, indeed, there may be greater willingness to take part in the online task. Finally, as our technology continues to evolve, better software tools are being developed that will enhance the meeting and interaction between participants in ways not possible in traditional settings. Beyond issues of practicality, there are additional ways that an online setting can prove advantageous; these are discussed below.

Ameliorating Anxiety Through Online Interaction

There is a growing body of evidence supporting the notion that the anxiety an interaction situation may provoke is significantly reduced when that interaction takes place through a text-based exchange on the Internet as compared to face-to-face. As noted earlier, inter-group interactions are often more anxiety-provoking than interpersonal ones, although those too can often elicit feelings of anxiousness. Anxiety increases the tendency to rely on stereotyping during an interaction, with lasting effects. Further, should an individual's anxiety or nervousness be apparent to others, they tend to be liked and accepted less by those others (e.g., Leary, 1983).

However, many of the situational factors that can foster feelings of anxiety in social situations (e.g., having to respond on the spot, feeling under visual scrutiny) are absent in online interactions. Because participants have more control over how they present themselves and their views online (e.g., being able to edit one's

comments before presenting them), they should tend to feel more comfortable and in control of the situation. They should be better able to and to more often express themselves, to be liked more by their online interactions partners than if they interacted in person, and to develop closer, more intimate relationships through online interaction.

Research on those with chronically high levels of social anxiety demonstrates just that. For instance, a recent laboratory study examined small group interaction among socially anxious and nonanxious participants (see McKenna & Seidman, 2005). Seventy-five undergraduate students at New York University were preselected for this study based on their responses on the Interaction Anxiousness Scale (Leary, 1983). Only those who scored at the high and low extremes of the scale were recruited for the study, and they were randomly assigned to interact in groups of three either face-to-face or in a specially-created Internet chat room. Immediately following the interaction, participants assessed how they felt during the interaction, as well as how accepted and included they felt by the other group members.

Consistent with their responses on the Interaction Anxiousness Scale, socially anxious individuals in the face-to-face condition reported feeling anxiety, shyness, and discomfort during the group interaction, while the opposite was true for nonanxious participants. In marked contrast, interacting online produced significantly different results. Participants reported feeling significantly less anxious, shy, and uncomfortable, and more accepted by their fellow group members than did those who interacted face-to-face—but these effects were wholly qualified by differences in levels of social anxiety. That is, the extremely extroverted participants felt equally comfortable, outgoing, and accepted interacting online and in person. For those experiencing high levels of social anxiety, however, the mode of communication proved pivotal to their feelings of comfort, shyness, and acceptance. Moreover, the self-reports of the socially anxious participants in the online condition on these measures were virtually identical to those of nonanxious participants in the face-to-face condition.

Those experiencing anxiety in social situations have also been found to take more active leadership roles in online groups than in their face-to-face counterparts. In a study by McKenna, Seidman, Buffardi, and Green (2005), participants were again preselected based on their interaction anxiety scores and randomly assigned to interact in groups of four (composed of two anxious and two nonanxious members) either in an Internet chat room or face-to-face. They then engaged in a decision-making task, following which they rated each of their interaction peers on measures of leadership, degree of participation in the discussion as compared to the other members, extroversion, and how much they liked the person based on their interaction. Peer ratings showed that socially anxious participants were as likely as their nonanxious counterparts to be perceived as leaders within the respective groups and to participate as actively when the interaction took place online. In the face-to-face condition, nonanxious participants received the leadership vote and were the more active participants. Socially anxious participants were viewed as more likeable and

extroverted when they interacted online than in person, while their nonanxious counterparts were viewed as equally likeable and extroverted in both situations.

Supersize It: Generalizing from the Contact to the Group

The largest hurdle to overcome is the tendency for the various members of the contact situation to come to feel quite close to one another and yet to view their new comrades from the outgroup as exceptions to their group rather than as normative representatives. Unless the members of the outgroup are perceived as representative members, the contact will have failed, for no changes in the perceived stereotype of the group as a whole will have taken place.

One of the advantages of online communication is that one can quite easily manipulate the degree of individual versus group saliency in a given contact situation in order to achieve a desired outcome. Spears et al. (2002) have argued that anonymous communication within groups leads to a sense of depersonalization by the group members. That is, members feel an absence of personal accountability and personal identity and thus the group-level identity becomes more important. When the group-level identity is thus heightened, Spears et al. (2002) have shown that group norms can have an even stronger effect than occurs in face-to-face interactions. The degree to which the group identity is salient, however, plays an important role in determining what the effects of anonymity will be on the development of group norms.

For instance, Spears, Lea, and Lee (1990) found that when members of online groups interacted under anonymous conditions and group salience was high, normative behavior increased in those groups as compared to electronic groups in which members were anonymous but the salience of the group was low. Whether group salience was high or low, participants who interacted under individuating conditions displayed an intermediate level of conformity to group norms.

One of the most interesting sets of studies examining the interaction between anonymity and identity-salience tested the effects of primed behavior in electronic groups. Postmes, Spears, Sakhel, and De Groot (2001) primed participants with either task-oriented or socioemotional behavior and then had them interact in electronic groups under either anonymous or identifying conditions. Members in the anonymous groups displayed behavior consistent with the respective prime they received considerably more so than did their counterparts who interacted under identifiable conditions within their groups. Normative behavior strengthened over time in the anonymous groups, with the members conforming even more strongly to the primed behavior. In contrast, when members were identifiable to other group members they actually bucked the norms and behaved more prime-inconsistently over time.

Further studies provided even stronger evidence of the effect that anonymity can have on normative behavior. In a study by Postmes et al. (2001), only half of the participants in each group received the behavioral prime. In the anonymous groups,

those participants who did not receive the prime nonetheless conformed to the task or socioemotional behavior being exhibited by their primed cohorts and did so significantly more than did the nonprimed participants in the identifiable groups. Further, those who interacted anonymously reported feeling a significantly stronger attachment to their group and to the other group members.

Importantly, in an online environment one can hit two birds with one stone; one can heighten the perception of the individual members as representative of their disparate groups while simultaneously fostering feelings of kinship and attachment to the "new group" composed of all members taking part in the exercise. There are a number of means by which the first can be achieved. For instance, one can provide all members with anonymous screen names that are evocative of the group they are representing (e.g., Pakistan 1, India 1, Pakistan 2) or, following Leah Thompson's procedure (see Thompson & Nadler, 2002) one can have each member briefly introduce him- or herself at the beginning of the interaction and ask each to include a statement stressing his or her typicality as a member, and so forth. As the interaction in the online environment progresses, group norms will begin to quickly emerge (Spears et al., 2002). These norms will be distinct from those that operate when members of group A are alone together and distinct from those unique to group B. Rather, these norms will emerge from the combined membership of groups A and B in the online setting, leading to heightened feelings of attachment and camaraderie among the participants. Thus, one can effectively invoke the necessary balance of a sense of both "us and them" among the participants that will allow for acceptance and generalization.

Getting More than just Skin Deep

Cook (1962) suggested that the more intimate the relationship, the more favorable the attitude of the groups was likely to be. He stressed the importance of the "acquaintance potential," or the opportunity provided by the situation for the contact participants to get to know each other. Recent research into the importance of personalized interaction (e.g., Miller, 2002) and intergroup friendships (e.g., Pettigrew, 1997, 1998) has reawakened interest in this aspect of the contact. It is also has a particular relevance to this discussion on contact through the Internet.

Mutual self-disclosure is a critical component for the formation of close interpersonal bonds and the establishment of a sense of belonging and acceptance. Thus problematically, interactions between in-group and out-group members are usually conducted on a casual and superficial level. For example, Taylor, Dube, and Bellerose (1986) reported a study carried out at McGill University, an English University in a French-speaking area of Canada. Most of the students (76%) are English speakers. One might think that, given the relatively high percentage of English-speaking students, the French-speaking students would engage in more interaction with English-speaking students than with French-speaking students. However, the sample of French students reported that fully 50% of their social interactions were with other

French-speaking students, a proportion notably higher (in fact, double) than their representation in the university. English-speaking students reported interacting with in-group members 87% of the time. Tellingly, participants reported that their interaction with in-group members was significantly more intimate than their interaction with out-group members.

One of the major advantages of Internet interactions over face-to-face interactions is the general tendency for individuals to engage in greater self-disclosure and more intimate exchanges there. Interactions online tend to become "more than skin deep" and to do so quite quickly (e.g., McKenna et al., 2002; Walther, 1996).

Spears and Lea (1994) suggest that it is the protection of anonymity often provided by the Internet that helps people openly to express the way they really think and feel. In line with this, McKenna and Bargh (1998, 1999) suggest that this sense of anonymity allows people to take risks in making disclosures to their Internet friends that would be unthinkable to them in a face-to-face interaction. More recently, McKenna, Buffardi, and Seidman (2005) found that, while people tend to engage in the greatest acts of self-disclosure when interacting under relative anonymity online, they also disclose more to their face-to-face friends and to family members when interacting with these individuals online. In other words, even without the cloak of anonymity, people more readily make intimate disclosures through their Internet interactions than through their face-to-face interactions, even when it comes to their nearest and dearest.

There are a number of unique qualities of the Internet that facilitate self-disclosure and intimacy online. As they have been discussed extensively elsewhere (see Ben Ze'ev, 2004; McKenna & Bargh, 2000; McKenna & Green, 2002; McKenna et al., 2002), we list them only briefly. They are: (1) a greater sense of anonymity or non-identifiability that leads to a reduced feeling of vulnerability and risk; (2) the absence of traditional gating features to the establishment of any close relationship—that is, easily discernable features such as physical appearance (beauty is in the eye of the beholder), mannerisms, apparent social stigmas such as stuttering, or visible shyness or anxiety; (3) a greater ease of finding others who share our specialized interests and values—and particularly so when there are a lack of "real world" counterparts (e.g., because of the marginalized or highly specialized nature of the interest, such similar others may not be present in one's physical community or, if they are, they are not readily identifiable); and (4) more control over one's side of the interaction and how one presents oneself.

The online environment seems to be particularly suited for "getting more than skin deep." The results of a laboratory experiment in which undergraduates were randomly assigned (in cross-sex pairs) to meet one another for the first time in an Internet chatroom or to meet face-to-face demonstrates this quite well. McKenna et al. (2002, Study 3) found that those who met online both liked each other more and felt that they had gotten to know one another better than did those who interacted face-to-face. This effect held when participants met one another twice, once in person and once over the Internet, unaware that it was the same interaction partner

in both situations. There was a significant correlation between the degree of liking for the partner and how well the participant felt he or she had gotten to know the other person for those who met over the Internet. However, there was no such correlation in the face-to-face condition. Along similar lines, Walther (1996, 1997) found that new acquaintances can achieve greater intimacy through online communication than they do in parallel face-to-face interactions.

Beyond the Cookie-Cutter Contact: Tailoring the Net Contact to fit Specific Needs

One of the greatest advantages of the Internet is the ability to tailor and tweak the various requirements to achieve optimal results for specific contact situations. Rather than being limited to a single intensive meeting that takes place over a few hours or days, multiple contacts can be arranged spanning days, weeks, and even months.

The anonymity and identifiability of participants can be manipulated depending on the particular needs of the situation and can be altered over time. The salience of the originating group and that of the "new group" can be heightened or lowered as needed. As research has shown, in some situations it is beneficial for the salience of the outgroup to be quite high and in others such heightened salience is detrimental to a successful contact. The Internet contact has the ability to serve both approaches and to examine which, if either, is more beneficial to the intergroup relationship. Group identity may be emphasized on the Internet by exercising control over the contact environment or, if it is thought appropriate, may be reduced if requested. This may be especially important with groups, which have salient physical character-istics that are impossible to reduce in face-to-face contact.

It is possible for the contact organizer to create an interactive information system on the outgroup that can be accessible to the ingroup participants both before and during the contact. In preparing this, its creators should gather information on the perceptions and stereotypes held by their group of the outgroup. They can then start to tackle the main components of the stereotype. This learning system will accom-pany participants through the different stages of the contact. The need to learn more about the outgroup may continue to be important for the participants at different stages of the contact process, i.e., before the contact, during the meeting sessions, between meetings, and after the contact program has been completed. Importantly, the ease of receiving needed information about the outgroup on the screen at any given moment can prove a useful aid in the creation of a positive intergroup contact. The ability of the Internet to supply a learning mechanism, where the information is accessible in a wholly interactive form and so can answer the specific requests and concerns of participants, creates a learning environment of a particularly high quality (Rosenberg, 2002).

Finally, when it is deemed necessary for participants to meet face-to-face for a successful contact to occur, it is possible to implement a "gradual model" approach leading up to that face-to-face contact to insure a greater chance of success. Using

this model, organizers can make use of an very gradual process to help the individual become comfortable with the contact situation and the other members, and to develop strong bonds with those other members before they ever meet in person. The main steps in this graded contact are as follows:

(1) Communicating by text only: This text-only interaction is the most common form of communication over the Internet. This stage will continue until the participant feels secure in this form of contact and his/her anxiety levels are negligible.

(2) Text + image: Participants will continue to use the text method with which they feel secure, but will simultaneously view a live video image of the person with whom they are interacting. When low-level social anxiety has been established, participants will transfer to the next stage.

(3) Communicating by video + audio: At this stage, people will still interact from their secure environment and still without physical proximity to their conversation partner. However, use of text messages by the subject will be reduced; instead he/she will communicate orally. In addition, a live image of the subject will be transferred to the other participant. Again, when a satisfactory level of comfort has been achieved, participants may progress to the next stage.

(4) Face-to-face interaction: This is the stage of regular face-to-face interaction. It is predicted that this process will successfully bridge the gap between text-only Internet contact and total exposure through a face-to-face encounter, and do so in a way that continually preserves low levels of anxiety among participants. As research by McKenna and colleagues has shown (Bargh et al., 2002; Mckenna et al., 2002), when interactions first begin over the Internet and then move to a face-to-face environment, participants not only like one another more than they would were they to have initially begun their interaction in person, but when the face-to-face meeting does take place it serves to heighten already strong feelings of liking and kinship.

Conclusions

The Internet has an enormous potential for providing tools to create effective intergroup contact. Its unique characteristics provide an excellent basis for such a contact, for example, by creating a secure environment, reducing anxiety, cutting geographical distances, significantly lowering costs, and by creating equal status, intimate contact,and cooperation. In addition, it offers the chance to receive approval from the authorities. The Internet is also a major information resource, and its ability to answer questions and provide knowledge in real time makes it a uniquely useful tool for the promotion of intergroup communication. The Internet may be said to provide opportunities for a successful contact that are superior to those provided in a traditional face-to-face meeting.

There are clearly potential obstacles in putting together a contact through cyberspace; and while taking this fully into account, it is our belief that contact schemes over the Internet may prove exceptionally effective tools in the pursuit of improved interpersonal and intergroup relations. One of the mechanisms that may be developed to support such schemes is found in the field of interactive learning systems which interact with each user individually. In addition, future research should reveal more information about different factors which affect such a contact; for example, the impact of personality on the Internet contact (Amichai-Hamburger, 2002).

Despite the questions that remain as yet unanswered, we believe that the advantages of using the Internet for an outgroup contact are exceptionally promising, and we advocate the introduction of the Internet as a vital part of contact between groups.

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