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**Identifying Key Themes in Cross-Group Friendship Formation**

A Dissertation Presented

by

**Kristin Marie Davies**

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The Graduate School

in Partial Fulfillment of the

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Abstract of the Dissertation

**Identifying Key Themes in Cross-Group Friendship Formation**

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in

**Social/Health Psychology**

Stony Brook University

**2009**

The primary objective of the current research was to investigate how cross-group friendships (as compared to same-group friendships) develop in the “real world,” and impact intergroup attitudes as they progress. Two studies investigated the processes by which cross-race versus same-race friendships were formed. An online retrospective study with 143 participants in cross-race friendships, and 152 participants in same-race friendship surveyed the general adult population, while a 3-wave longitudinal study with 35 cross-race and 16 same-race participants was conducted with University students. Results suggest that those participants in cross-race friendships were found to have initially met through mutual friends less often than those with same-race friends. Furthermore, intimate interpersonal processes were found to play important roles in the formation and maintenance of cross-group friendships. Many friendship development and maintenance factors, particularly those concerning affect, and perceptions of concern and active involvement of the friend, were associated with factors relating to own and friend’s group membership, in addition to intergroup attitudes. Implications and future directions are discussed.

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## **Introduction**

The broad goal of the current research was to gain a greater understanding about people's real-world experiences of forming cross-group friendships. Recent meta-analyses of the intergroup contact literature have found intergroup friendships to be the type of contact associated with the most positive intergroup attitudes (Pettigrew, 1997; 1998; Pettigrew & Tropp, 2006). However while much is known about friendship development in general (e.g., Duck, 1983; Fehr, 1996; Hays, 1984; 1985), little is known specifically about how cross-group friendships develop, and how factors specific to friendship development processes may have a unique role in an intergroup context. Work by Turner, Hewstone and Voci (2007) has highlighted the importance of self-disclosure as a key avenue by which friendship reduces prejudice, and suggests that self-disclosure works by creating feelings of empathy, importance of contact, and trust for the outgroup. This research marks a necessary first step in clarifying how intimate interpersonal processes can have a major impact on improving intergroup relations. Further work is required, however, to gain a more complete picture of how one goes from meeting an outgroup stranger, to having further interactions, to labeling them a friend, to feeling positive about the friend's entire outgroup.

## **I. Background**

Despite the recent surge in research about cross-group friendships, previous studies in this area either inquired about a current friendship or used experimental procedures to generate feelings of closeness between strangers. To my knowledge, no previous work has examined naturally occurring cross-group friendship development, with a dual focus on interpersonal and intergroup processes. The goal of the current research was therefore to assess both relevant interpersonal variables (e.g., initial attraction and concerns, liking, overlap of social circles, partner concern, self-disclosure, trust, understanding etc.) and intergroup variables (e.g., intergroup attitudes, admiration and sympathy for outgroups, warmth felt for outgroups, intergroup anxiety etc.) across the development of a cross-group friendship. The main objective of the current research was therefore to reveal how cross-group friendships, as compared to same-race friendships, are forged in the real world, and to identify at which point in the process intergroup attitudes are affected, and by which variables.

## Anxiety and Intergroup Contact

Robin Williams (1947) and Gordon Allport (1954) were the first to hypothesize that cross-group interaction may improve intergroup attitudes. Williams highlighted the importance of equal status, shared interests, and situations involving intimate contact as being especially influential. In *The Nature of Prejudice* (1954), Allport identified optimal conditions: equal status, common goals, cooperation instead of competition, and support of authorities and institutions. These initial theories stimulated what has become a vast literature, and the contact hypothesis has been investigated in various settings, locations, and among a wide range of social groups across the world, receiving an overwhelming amount of empirical support overall (Pettigrew, 1998; Pettigrew & Tropp, 2000, 2006).

Although contact generally leads to improved feelings about outgroups there are, nonetheless, many individual and contextual factors that may contribute to the failure of cross-group contact to have an impact on attitudes. First, an individual's minority (i.e., traditionally devalued or stigmatized) or majority group status can greatly influence how they view the world in general and thus also view their interactions with and attitudes about outgroups. Recent work in this area has found that although contact tends to greatly influence the attitudes of majority group members, the relationship between contact and prejudice is much weaker among minority status group members, and this pattern holds even in situations where all of Allport's current conditions for optimal contact are present (Tropp & Pettigrew, 2005).

One's majority/minority group status can also affect the immediate cross-group interaction situation. Shelton's (2003) work has highlighted the ways in which whites' (i.e., majority group) concern about appearing prejudiced and blacks' (i.e., minority group) concern about being the target of prejudice differentially impact the interaction experiences of both types of participants. Although whites who tried not to be prejudiced experienced more anxiety and less interaction enjoyment, they were more greatly liked by their black partner. Conversely, blacks who believed their partner was prejudiced enjoyed the interaction more, and their white partner experienced less anxiety and enjoyed the interaction more as well.

Not surprisingly, previous negative experiences with outgroup members can discourage the likelihood of future comfortable cross-group interactions. Past intergroup interactions and intergroup attitudes have been shown to predict the extent to which individuals become anxious in situations of further cross-group contact (e.g., Devine, Evett, & Vasquez-Susun, 1996; Stephan & Stephan, 2001). Majority group members in high states of anxiety can perceive intergroup interactions as being extremely difficult, and outgroup partners as being very dissimilar (Britt, Boniecki, Vescio, Biernat, & Brown, 1996). Apprehension regarding possible rejection, or race-based rejection sensitivity (Mendoza-Denton, Downey, Purdie, Davis & Pietrzak, 2002), causes minority group members to be vigilant for cues of prejudice and discrimination in cross-group interactions, for their behaviors in those situations to be affective and quite reactive, and can also lead to general avoidance of intergroup interactions. Tropp (2003) found that when minority participants overheard a confederate partner's desire to switch partners

due to the participant's race, they felt hostile and anxious when told they'd have to interact with the confederate, and also reported marginally more negative expectations for future interactions with outgroup members. It is interesting to note that in this study, having outgroup friends did counteract the negative impact of race-based rejection as it related to participant expectations for future cross-group contact, but it did not have any impact on the participant's emotional reactions to having to interact with the prejudiced confederate in the present.

Clearly, a major theme in the intergroup contact literature has been the role of intergroup interaction anxiety in preventing a positive change in attitudes. Oftentimes, individuals for whom group membership is salient in their intergroup interactions can feel quite uncomfortable and find cross-group situations difficult. However, there has recently been a focus in the intergroup contact literature identifying situations in which the influence of anxiety can be curbed. In particular, friendship has been identified as an excellent condition for cross-group contact to occur because it is likely to inherently lack the negative emotional issues mentioned above. Pettigrew (1997) has described such contact as having "special importance" because it involves longer-term contact, includes both affective and cognitive underpinnings, and likely contains most of Allport's necessary conditions for success in prejudice reduction. Pettigrew (1997) found immense support for the above notion in his large study that surveyed four European nations, where cross-group friendships were associated with more positive outgroup attitudes to a greater degree than were general acquaintances.

In order to clearly understand why cross-group friendships have this unique ability, however, it seems quite valuable to first look more closely at the nature of friendships in general.

### The Special Nature of Friendship Relationships

Friendship is an aspect of life valued by most people. When asked to identify types of love, friendship is listed the most frequently (Fehr & Russell, 1991), and in a study assessing beliefs about "what makes life meaningful" almost all of those responding included friendship in their answer (Klinger, 1977). Earlier work by Tesch and Martin (1983) investigated how people define their friendships, and the majority of the responses (33%) were classified as addressing issues of reciprocity (i.e., dependability, caring, commitment and trust). The second most frequently occurring responses (10%) included compatibility, openness, acceptance and similarity, and these were followed by responses about the individual being a good role model, being unique, and issues relating to time spent together. Furthermore, Tesch and Martin (1983) found few disparities in response content based on demographic factors such as age, gender or marital status, indicating that overall, people generally hold similar notions about what constitutes a friend. These results are in line with other investigations of friendship definitions employing a similar methodology (e.g., Crawford, 1977; Sapadin, 1988).

It is also useful to understand how close relationships, and friendships in particular, differ from interactions with strangers, acquaintance, and kin relationships.

Compared to interactions with strangers, interactions with friends include greater proximity, touch, and body contact (Lewis, Young, Brooks, & Michalson, 1975), more laughing, talking and negative criticism and blame (Jormakka, 1976), communication quality, higher value of interaction, and greater mutual control (Duck, Rutt, Hurst, & Strejc, 1991) and also more expressions of both agreement and disagreement (Gottman, 1983). There are also many distinctions between general acquaintanceship and friendship identified in the literature. Among friendships, rather than acquaintanceships, there exist greater perceptions of cohesiveness among partners (Hindy, 1980), more disclosure, greater trust, more secrets and promises kept (Rotenberg, 1986), more positive comments for partner, greater supportiveness (Berndt & Perry, 1986), greater reciprocity of positive behavior (Lederberg, Rosenblatt, Vandell, & Chapin, 1987), and greater mutuality and matching of affective expressions (Newcomb & Brady, 1982). Furthermore, because people choose their friends voluntarily, there exists a potential for relationship dissolution that doesn't exist with one's kin, and because of this the trust that underlies friendship bonds is quite unique (Rubin, 1985). The general theme appears to be that, in friendships, people are more comfortable sharing personal information with one another, are more comfortable behaving physically close with one another, are generally in sync with one another, more positive with one another, and get more enjoyment out of each other's company.

Based on the overwhelmingly positive descriptions of friendships above, it is not surprising that people strongly value and hence seek out these types of relationships. Duck (1983) has outlined various benefits of friendships, which include feeling a sense of belonging, emotional integrity and stability, opportunities for communication about ourselves, assistance and support, reassurance of growth, opportunities to help and feel valuable, and finally, personality support (i.e., support of personal values and beliefs). In addition, Rubin (1985) had delineated the ways in which "friends have a powerful effect on the development of a full, coherent and satisfactory sense of self" (pg. 12). She asserts that friendships allow for testing of various aspects of a self-identity, and that friends "mirror" the self in that, because they are comfortable being honest, through their responses "we learn much about ourselves" (pg. 40). Friendships can also help individuals to follow their aspirations, and people may choose to associate with those who help them to become the type of person they strive to be, as each new friendship reflects "some part of our self that cries out for expression" (pg. 42). Friendships therefore create an opportunity for people to grow as individuals, and lead fuller, more satisfying lives.

In discussing friendships, it is important to touch upon the many variables and processes involved in this type of relationship. Fehr (1996) broadly covers the topic of friendship in her book *Friendship Processes*. She first outlines four major classes of earlier relationship theories of particular relevance to friendship, including reinforcement theorists, who focused on rewards and attitude similarity (e.g., Byrne & Clore, 1971; Byrne, 1971), social exchange and equity theorists, who focused on interdependence and investment in ongoing relationships (e.g., Hatfield & Traupmann, 1981; Thibaut & Kelley, 1959; Rusbult, 1980), cognitive consistency theorists, who focused on one's need

for balance in life (e.g., Heider, 1958; Newcomb, 1961), and developmental theorists, who focused on changes in relationships over time (e.g., Altman & Taylor, 1973; Levinger & Snoek, 1972).

Fehr (1996) further integrates previous work on friendship formation, the main categories being environmental factors, individual factors, situational factors, and dyadic factors. The environmental factors influence the first step of the friendship process as they determine whether individuals will have initial contact at all. The chief variables in this category are residential proximity, workplace, rural versus urban setting, and the role of pre-existing friendship networks in either introducing individuals or discouraging further interactions.

Once the potential exists for initial interactions to actually occur, individual factors come into play in one's determination of whether they perceive the other as being a good friendship candidate. As described by Rodin (1982), first an assessment of "write-off factors" takes place, and these are dislike characteristics (i.e., perceived "dislikable" qualities) and disregard characteristics (i.e., perceived "unsuitable" qualities, usually demographic in nature). If one finds no such write-off factors in their potential friend, they continue their analysis by investigating "inclusion criteria" including physical attractiveness (e.g., Patzer, 1985), social skills (e.g., Cook, 1977), responsiveness (e.g., Davis & Perkowski, 1979), shyness (e.g., Jones & Carpenter, 1986), and similarity (e.g., Woolsey & McBain, 1987). Situational factors, similar to environmental factors, have less to do with the nature of a particular individual and more to do with issues of practicality. As Fehr describes, "factors such as how often we are likely to see the person and whether we are dependent on the person for something are important" (1996, pg. 58).

Finally, dyadic factors contribute to the ultimate decision to pursue a potential friendship, and largely involve factors related to one's perception of how the other feels about the self. First, reciprocity of liking plays a large role in the forging of meaningful connections between individuals (e.g., Backman & Secord, 1959). As delineated by social penetration theory (Altman & Taylor, 1973), one's perception of the other's willingness to self-disclose, both in terms of depth (i.e., discussing deeply personal issues) and breadth (i.e., discussing a wider variety of topics), is a key factor during this stage as well. There is a limit to what people perceive as an appropriate level of disclosure, however. There must be a balance between disclosing enough personal information to show that one trusts and values the other, and disclosing too much information and making the other feel uncomfortable (e.g., Archer & Berg, 1978). Once a potential friendship exists, the rate by which individuals become close can vary depending on many interpersonal factors, but most friendships evolve through further communication and interactions. As a relationship develops, the breadth and depth of self-disclosures typically increase (e.g., Altman & Taylor, 1973). Furthermore, Knapp and colleagues (1980) identified other interaction properties and had participants rate how much each of them corresponded with particular relationship types. Friendships were described as including more personalized communication (i.e., depth of disclosure, uniqueness and flexibility) and more synchronized communication (i.e., coordination and smoothness of communication, spontaneity). The closer that one becomes to their friend,

the greater trust they put in that person, and the greater comfort they have in disclosing more personal information and on more occasions (Roberto & Kimboko, 1989). Closer friends have greater involvement in one's life (Barth & Kinder, 1988), have more frequent interactions, and are more likely to be regarded as a "confidant" and source of emotional support (Hays, 1985).

### Friendship as an Opportunity for Quality Intergroup Contact

Given the above description of friendship, it comes as no surprise that research investigating this method of cross-group contact attributes its success to the high quality of these types of interactions (e.g., closeness felt to outgroup members, inclusion of outgroup member in self identity, trust for outgroup members, self-disclosure to outgroup members). This may occur via increased liking that develops as an individual repeatedly interacts and self-discloses personal information, forging an emotional bond to the outgroup individual which then generalizes to the entire outgroup (Pettigrew, 1997).

A second avenue by which closeness may influence intergroup attitudes is through "inclusion of other in self" (Aron & McLaughlin-Volpe, 2001; McLaughlin-Volpe, Aron, Wright, & Reis, 2000; Wright, Aron, McLaughlin-Volpe & Ropp, 1997). As one develops feelings of closeness to an outgroup member, one becomes less able to clearly distinguish between group boundaries due to the merging of cognitive representations of one's own "self" with that of the "other." This model has found much recent correlational and experimental support for its notion that as relationship partners become more intimately connected, they (to some extent) come to "include in their selves the resources, perspectives, and identities of their partners" (Aron & McLaughlin-Volpe, 2001, p. 98). Through this inclusion of an outgroup friend in the self, one comes to also include the outgroup as a whole, as that group identity is a part of the relationship partner's self identity. And so, to the degree that one includes the outgroup friend in one's cognitive construction of the self via level of intimacy, one also includes, to a related extent, the outgroup identity of that friend, and one is thus motivated to have an improved attitude towards said outgroup given its now association with the self via inclusion.

In addition, Miller (2002) has highlighted the importance of self-disclosure in the personalization model of intergroup contact, proposing that it promotes trust and reduces anxiety and discomfort, thereby allowing for more accurate information processing and thus a reduced likelihood in stereotype usage. As elaborated above, the importance of shared intimacy in the development and maintenance of self-other connections has been well documented in the interpersonal relations literature. Self-disclosure has been deemed "the primary route through which people develop intimacy in their relationships" (Fehr, 2004, p. 16; See Also Altman & Taylor, 1973; Reis & Shaver, 1988). In a study investigating people's lay theories of prototypical friendship interactions, Fehr (2004) found that behaviors rated as most likely to "to produce a sense of intimacy" (pp. 11) were those describing self-disclosure (e.g., "If I talk, my friend will listen") and social

support (e.g. emotional support, trust), rather than other types, such as practical help (e.g., borrowing something, lending money).

Indeed, self-disclosure has received some recent attention in the intergroup literature focusing on the role of friendship. Turner, Hewstone & Voci (2007) found that self-disclosure in cross-group friendships causes empathy for the outgroup, trust for the outgroup, and the belief that contact with the outgroup is important. This, in turn, leads to improved intergroup attitudes overall. In addition, although intergroup anxiety was found to mediate the relationship between cross-group friendship and prejudice, Turner & colleagues (2007) found that self-disclosure was a more powerful mediator. They suggested that this was likely the case because intergroup anxiety mainly occurs between strangers, and also because self-disclosure contains an affective component responsible for generating intimacy.

Furthermore, it appears that even experimentally manipulated self-disclosure can improve intergroup attitudes. Feelings of closeness are first generated between cross-group pairs through a series of questions invoking self disclosure (Aron, Melinat, Aron, Vallone & Bator, 1997). When attitudes are assessed as much as four weeks after the initial procedure, attitudes about the group of one's partner are found to have improved (Davies, Aron, Wright, Brody & McLaughlin-Volpe, 2007; Wright & van der Zande, 1999). Recently, Page-Gould, Mendoza-Denton & Tropp (2007) have expanded this work and have demonstrated that the closeness-generating procedure can ameliorate one's initial intergroup anxiety, opening the door for the development of intergroup trust and improved intergroup attitudes.

## **II. The Current Research**

Undoubtedly, the above findings are incredibly encouraging. They provide valuable support for the notion that people's concerns about intergroup contact can be alleviated under circumstances in which outgroup contact partners display warmth and reveal genuine concern. In friendship, an individual can be trusted to have one's best interests at heart, and because of this, one is likely to trust that individual to understand many aspects of their life, perhaps including issues surrounding one's group membership.

While the findings above are indeed useful in an initial identification of the value of meaningful, personalized cross-group contact, they nonetheless raise an important practical issue: if friendships are the best means by which to improve intergroup attitudes, and individuals with intergroup anxiety typically avoid interactions with outgroup members, how is it that these friendships developed to thwart such hesitations in the first place? Furthermore, what are the specific variables involved in reducing peoples anxieties and improving intergroup attitudes, and at what point in the friendship



development process do they emerge and have an impact? The current research combines the methodology of previous friendship development work (i.e. focus on interpersonal relations) with the methodology of research that has looked at how intergroup attitudes have change overtime (i.e. focus on intergroup relations).

### Research Questions

Question One: How do cross-group race friendships begin? How does this compare to the formation of same-race friendships? Given that people having intergroup interaction anxiety tend to avoid cross-group contact (Plant & Devine, 2003); what are the circumstances under which the formation of a cross-group friendship is facilitated? Research question one sought to identify the social and psychological factors that help to facilitate the development of a friendship between outgroup strangers despite any initial concerns. An additional interest was in investigating potential differences between the relationship development factors of same-race and cross-race pairs.

Question Two: How do early cross-group relationships, as compared to same-race relationships, progress to friendships, and what factors play a role in maintaining these friendships? While individuals may identify outgroups with whom they have relationships or contact, the prejudice literature highlights the importance of the quality of cross-group contact as being key for undermining existing prejudicial beliefs and bias and fostering positive cross-group interactions (e.g., Herek & Capitano, 1996; Levin, van Laar, & Sidanius, 2003). Thus, the focus here is on how individuals move from identifying outgroup members as acquaintances or potential friends to identifying outgroup members as friends. Variables in the general friendship literature pertinent to this relationship stage were investigated, such as assessment of friendship potential via perception of the potential friend's perceived similarity, friendly behaviors, amount of self-disclosure, trustworthiness etc., as an indication of the quality of the relationship. I also sought to examine how these processes differ when compared to same-race friendships.

Question Three: What role does group membership play at each level of the friendship process? Variables investigated that relate to the cross-group nature of the relationship were intergroup anxiety, salience or visibility of group categories, perceptions of one's and friend's group being the targets of prejudice, whether one and one's friends are typical members of their groups, as well as the majority/minority group status of the individual and ethnic identity.

Question Four: What is the relation of early and later interpersonal processes, and of group membership factors, to intergroup attitudes? This question aims to investigate the association of one's intergroup attitudes to both friendship processes and factors associated with one and friend's group membership. That is, I sought to explore a broad range of interpersonal factors in conjunction with intergroup factors.

### Overview of Current Studies

The research objectives outlined above were carried out by employing two studies. The first was an online retrospective study investigating the recollections of those in established cross-race or same-race friendships among the general adult population. The second was a longitudinal study investigating the development of cross-race and same-race friendships at three time points over the course of a semester among university students. The current research therefore had the benefit of assessing the chief variables of interest within two very different, yet complementary settings.

### **III. Study One**

#### **Method**

##### **Participants**

A total of 300 adults took the online retrospective survey in its entirety. Participants were recruited through a variety of means including the forwarding of emails sent from the investigator, postings on facebook.com and myspace.com, postings on craigslist.com, fliers posted in various neighborhood businesses, and several social psychology listservs. Of these 300 participants, 1 was removed due to answering the survey about someone they have lost touch with, 1 was removed due to having romantic feelings for the survey target person, and 3 were removed due missing data. Among the resulting total of 295 participants were 63 males and 232 females whose ages ranged from 18 and 81 with a mean of 38 years. The largest percentages of racial backgrounds among participants were 65% white (i.e. European background), 13% Asian, 5% Latino, 3% African, 3% mixed Latino-white, and 3% South Asian (e.g. Indian). In terms of location of participants, 69% were from the Northeastern United States, 7% were from the Southeastern United States, 6% were from the Western United States, 5% were from the Midwestern United States, 4% were from Canada, 3% were from the Southwestern United States, 2% were from Europe, 2% were “other”, and a single Asian, Australian, and New Zealander each took the survey.

##### **Questionnaire**

The survey (See Appendix 1) began by inquiring about demographic information such as age of participant, gender of participant, country of origin, and how one had heard of the survey.

Questions aimed at assessing variables in the earliest stages of the relationship included the following: years and months of knowing the friend, age at first meeting, circumstance of meeting, degree of choice of first contact, factors making the individual a good friendship candidate (e.g., outgoing, unique individual), initial concerns about

friendship development issues (e.g., too arrogant, too shy), length of time until feeling like “friends” and until secrets were shared, concerns about potential differences (e.g. lifestyle or cultural background may be too different), initial nervousness when interacting, behaviors that helped to further develop the relationship (e.g. increased comfort, trust), realizations that one wouldn’t judge, and respected views, and behaviors of friend indicating an interest in friendship (e.g., saying hello, invitations to activities).

Items assessing current friendship processes included beliefs that friend is unique, importance of friend to participant, participant’s caring for friend, participant’s sharing of personal information, trust, closeness, inclusion of the friend in the “self” (Aron, Aron & Smollan, 1992; See Figure 1), warmth, belief that participant is important to friend, than friend cares, that friend trusts the participant, an assessment of how often friendly behaviors occur (e.g., telling one he/she cares, spending time together), “good things” about being friends with the individual (e.g., can count upon him/her), things one would do for the friend (e.g., give up time, lend money), balance between efforts and benefits, belief that the friendship will continue, and potential issues that would harm the relationship (e.g., one’s moving away, having children).

For those in cross-race friendships, questions concerning the cross-group nature of the relationship included initial feelings upon interacting (e.g. nervousness, excitement to learn something new), early and current degree to which one notices the cross-group nature of the relationship (i.e., salience), beliefs about how much one’s and friend’s groups were ever the targets of prejudice, questions about friend’s involvement his/her group (e.g., attending activities), how much friend and participant join each other in the activities of their respective groups, discussion and explanations of group-related issues, perception that friend understands and respect one’s group, how much friend is like other outgroup members, spending time with friends family and friends of the outgroup, how much one’s and friend’s family and friends support the cross-race friendship, differences from one’s same-race friendships (e.g., speak another language), and perceived benefits and challenges.

Participants describing either type of friendship (cross-race or same-race) both answered the same items concerning intergroup attitudes. However, due to the branching of the online survey, the phrasing for the items was slightly different for each participant group. For those describing a cross-race friendship, all questions were directly asked about the group of one’s friend (e.g. “How much sympathy do you feel for this group?”). For those describing a same-race friendship, items were about four specific target groups: people with African backgrounds, Asian backgrounds, European backgrounds (i.e. white), and those with Latino backgrounds. Attitudes were calculated by averaging feelings for all but the participant’s own racial group (e.g. a white participant’s sympathy score would be the average of their sympathy ratings for Africans, Asians and Latinos). For those same-race friendship participants having a background other than one of the four target racial outgroups (e.g., if the participant was a Native American), ratings for all four target outgroups were combined for a total assessment of intergroup attitudes.

The following items made up the final portion of the survey and were concerned with one’s intergroup attitudes. Unless otherwise noted, all scales were presented on a 7-

point likert-type instrument. For all items, higher numbers indicate a higher level of that variable, whether for a positive variable (e.g. “empathy”) or a negative variable (e.g. “anxiety”). A “feeling thermometer” was used to assess warmth for outgroup; participants could choose any number between 0 and 100, with higher scores indicating warmer feelings. An assessment of bias was created by subtracting one’s feeling thermometer rating for their own racial group from the average of their ratings for outgroups. All participants answered questions about specific target racial groups for this assessment, even those describing a cross-race friendship. Two items from Pettigrew and Meertens (1995) Subtle Prejudice Scale (sympathy for outgroup and admiration for outgroup) were used to assess feeling for outgroups in a way that is somewhat less influenced by social desirability. The alpha reliability for this measure was .77. As an assessment of empathy for outgroups, participants were asked how much they “feel for” and “understand” target outgroups. The average of these two items created an overall score of empathy for outgroups with an alpha of .81. Beliefs about the amount of truth in common stereotypes about outgroup(s) was assessed with a single item; “How much do you believe that there is some truth in the stereotypes about (GROUP NAME)?” An assessment of perceived similarity (high scores indicating similarity) of one’s ingroup to outgroup(s), a single item inquired “How similar or different is your group to those with an (GROUP NAME) background?” Intergroup anxiety was assessed using a single-item based on Stephan and Stephan’s (1985) measure; “Imagine you are in a situation where everyone else in the room is (GROUP)” – How would you feel?” (Relaxed – Anxious; high scores indicate anxiety). Although anxiety is considered an “intergroup” variable more than an attitude variable in the current research, it was presented in the survey along with the attitude items. Finally, two items from Plant and Devine’s (1998) measure of “internal and external motivation to respond without prejudice” were used as an assessment of social desirability. The external motivation item was “I attempt to appear non-prejudiced towards people from other ethnic groups in order to avoid disapproval from others.” The internal motivation item; “Because of my personal values, I think using stereotypes about people of other ethnicities is wrong.”

## Procedure

The online questionnaire was created using SurveyMonkey.com. After first entering the website, and after going through the consent and demographic information sections, the next section of the survey instructed the participant to answer the questionnaire about their closest friend of a different race, if they currently had one (i.e. they had not lost touch with this person), and if this person was not ever a romantic interest. Otherwise, people were instructed to take the survey about their closest same-race friend. After about 100 cross-race friendship participants had been recruited in this manner (about 50 same-race participants had been recruited at that point), this section was changed to instead instruct people to take the survey about their closest same-race friend, if they currently had one who was not ever a romantic interest. They were instructed to only take the survey about a cross-race friend if they currently had no same race friends. This measure was taken in attempts to gain a wider variety of individuals to

serve in comparison group. It was also done to try and control for the possibility that people answering about a same-race friend are likely answering the survey about their very closest, whereas this may not necessarily be the case for those answering about cross-race friends. Of the 295 participants, 143 responded regarding a cross-race friendship, while the other 152 responded in regards to a same-race friendship.

Once participants began the survey, the SurveyMonkey.com program led them through question sections based which type of friendship the participant chose to discuss. Participants in both groups answered identical question sections about early friendship processes, current friendship processes, a section on personality and ethnic identity, and the final section which had feeling thermometers for the four target racial groups. There was one key difference between participant groups regarding survey content: Cross-race friendship participants took a section regarding intergroup variables in their relationship, while same-race friendship participants answered intergroup attitude items about all four target ethnic groups. The intergroup attitudes of cross-race friendship participants were instead included at the very end of the section concerning intergroup relationship variables. Upon completion of the survey, participants were given the opportunity to provide their contact information so that they could be entered in a drawing for a \$50 Amazon.com gift card to take place in early August 2009.

## Results and Discussion

Research Question One: How do cross-group race friendships begin? How does this compare to the formation of same-race friendships? A series of *t*-tests investigated several variables assessing features of the earlier stages of the friendship (See Table 1). Same-race participants reported a significantly greater number of interactions due to mutual friends. They also reported a greater degree of trust development at the early stages of the relationship than did cross-race friends. Cross-race participants reported meeting their friends at a significantly older age than same-race participants. They also reported significantly greater concerns about having difficulty traveling to see their then potential friend than did same-race friends. Not surprisingly, cross-race friendship participants also reported significantly greater initial concerns that differences in ethnic and cultural backgrounds might make the relationship difficult.

Interestingly, there were no significant differences between cross-race friends and same-race friends on a large number of recalled early friendship variables (in spite of reasonably high power for detecting such differences given the moderately large *N* in each group). For instance, no significant differences were observed regarding degree of choice in initial interactions, initial perceived similarity, one's friend making them feel welcome, warmth of friend, outgoingness of friend, and early perceptions of uniqueness of friend. There were also no differences regarding "how fun" friend was, attractive characteristics of friend, attractiveness of lifestyle of friend, length of time until feeling like "friends," length of time until very personal information was shared, perceived personality differences, lifestyle differences, religious differences, financial situations, political beliefs, and initial nervousness interacting.

A series of chi-squares examined potential differences between friendship type (cross-race and same-race) regarding early relationship concerns. Interestingly, no significant differences emerged regarding early concerns about the potential friend being uninterested in a relationship, being too shy, too arrogant, too outgoing, too mean or unfriendly, not smart enough, or too “different” from one’s self to become friends. There was also no significant difference regarding feeling that there were “no problems” from the outset; this feeling was endorsed by the vast majority of both same-race (91%) and cross race participants (87%).

A second series of chi-squares examined potential differences between friendship type (cross-race and same-race) in the frequency of various friendly behaviors early in the relationship. A chi-square of “saying hello” (yes or no) and group (cross-race or same-race) revealed that significantly more participants with cross-race than same-race friendships experienced their friend going out of their way to say hello to them ( $\chi^2[1] = 7.23, p < .01$ ). A chi-square of “activity invitations” (yes or no) and group (cross-race or same-race) revealed that significantly more participants with same-race (77%) than cross-race friendships (61%) experienced their friend inviting them to do activities together ( $\chi^2[1] = 9.80, p < .00$ ). A chi-square of “invitations to visit at home” (yes or no) and group (cross-race or same-race) revealed that significantly more participants with same-race (67%) than cross-race friendships (41%) experienced their friend inviting them to do activities together ( $\chi^2[1] = 19.85, p < .00$ ).

Participants reported about equal amounts of friend’s interest in learning about their background, regardless of friendship type (52% of Cross-Race friends interested, 48% of same-race friends interested). In addition, participants in cross-race and same-race friendships reported similar levels of “instant” friendship (28% for cross-race and 32% for same-race). A chi-square investigating “main reason” for becoming friends revealed no significant differences by group type. Further interactions with the individual via mutual friends, forming a relationship at work, and of undergoing an “unusual experience” together occurred at similar frequencies for both types of friendships. When looking only at the frequency of seeking the friendship of the individual due to his or her “uniqueness”, however, it was found that more participants with cross-race (8%) than same-race friendships (2%) did this ( $\chi^2 [1] = 5.79, p < .05$ ).

#### Summary of Findings: Research Question One

In sum, on most variables the two types of friendships did not differ; however there were significant modest to large differences in which cross-race friends were more likely to have met at older ages in their lives, and reported more early concerns about potential problems in developing a friendship. In comparison, same-race friends reported, having more initial interactions via mutual friends, greater trust earlier in the relationship, and a greater frequency of early friendship invitations to participate in activities with one’s then potential friend.

Research Question Two: How do early cross-group relationships, as compared to same-race relationships, progress to friendships, and what factors play a role in

maintaining these friendships? To examine this research question several Chi-square and t-test analyses were employed to examine different frequencies of endorsing particular friendship items, and differences in their means based on friendship type. Specifically, I investigated differences between friendship types in their views about relationship benefits, willingness to do various friendly behaviors, and concerns about potential reasons for relationship dissolution.

An investigation of differences between friendship type (cross-race versus same-race) in friendship benefits (See Table 2) revealed that those in same-race friendships felt that they could share personal details with their friend more often than cross-race participants. In addition, same-race friendship participants were more likely to agree that they have a lot of “history” with their friend, and that they have had “meaningful experiences” with their same-race friends. However, a significantly greater percentage of those in cross-race friendships described their friend as “kinder than most people.” Interestingly, however, there were no significant differences between those with cross-race versus same-race friends with regard to willingness to lend money, give up one’s time, travel far distance for one’s friend, or help with an arduous task.

When investigating endorsements of possible reasons for a dissolution of the friendship (See Table 2), significantly less same-race friends than Cross-Race friends reported potentially moving away, and that their friend might move away. Furthermore, those in same-race friendships were also less likely to report that they might become too busy with work, and that their friend would become too busy with work. Finally, those in same-race friendships were significantly more likely to agree that their friendship is “too strong to ever end.” There were no significant differences between friendship types regarding concerns about becoming too busy with marriage or children, nor about developing different interests.

Finally, in looking at basic differences in means between friendship types across several key current friendship attitudes (See Table 3), it was found that those in same-race friendships, as compared to cross-race friendships, felt greater levels of warmth for friend, closeness, inclusion of friend in sense of self, and feelings that the friendship will continue into the future.

### Early Stages of Friendship

An additional focus in approaching this question was to examine how the relations among friendship development variables (both early and late in the relationship) differ between the two types of friendships. Thus, I conducted a series of regression interactions, for each of which the predictor variables were a dummy coded friendship-type variable (cross-race vs. same-race friend), a particular friendship variable of interest, and their product; the outcome variable was a second friendship variable of interest. A significant unique relationship between the product term and the dependent variable (that is, the product term’s effect after partialing out the influences of the individual predictor variables making up the product term) would therefore indicate that significant differences exist between cross-race and same-race friendship participants in how those friendship variables of interest relate to each other. (That is, I applied the standard

method for testing the difference between two groups in degree of association of any two variables.) To determine which potential interactions to analyze, I first conducted a series of correlations within each friendship type. Then, based on visual inspection of these tables for strong or conceptually interesting correlations (especially where they appeared to differ between groups), I selected pairs of variables for further exploration using this regression interaction method.

I carried out a series of regression analyses testing the effects of interactions between friendship variables at the early stages of the relationship, and friendship type (cross-race versus same-race) on current friendship variables (See Table 4).

There were significant differences between the two friendship types in the associations of early perceived similarity with beginning to help each other, early development of trust, realizing that the friend wouldn't judge the participant, realizing that the friend respected the participant's viewpoint, current friendship importance, the current sharing of very personal information, and inclusion of other in the self. Similarly, there were significant differences between the two friendship types in the association of the welcoming nature of the friend early in the relationship with amount of time until feeling like "friends", beginning to help each other, beginning to self-disclosure, beginning to be "completely honest" with each other, current perceptions that one's friend cares, current trust for one's friend, and inclusion of other in the self.

I then examined the role of early perceptions of the friend's uniqueness on other early-stage relationship variables, and none of the differences in associations among the variables were significantly different between the two groups. In looking at friend's early uniqueness in relation to current friendship variables, however, several significant differences were discovered. The two groups differed in the correlation of perceived early-stage uniqueness of friend with current importance of friend, belief that friend cares, and that the friend trusts the participant.

Further regressions revealed significant interactions between friendship type and having mutual friends on initial nervousness, on amount of time it took to feel like "friends" and relationship development via "staring to help each other". The interaction of friendship type and early concerns of potential ethnic and cultural difficulties predicted early perceptions of lifestyle differences.

Furthermore the interaction of friendship type and early concern that the participant's own social circle would make a friendship difficult significantly predicted concern for difficulties due ethnicity, concerns about having political attitudes that were too different, and early concerns that traveling to see the potential friend would be too difficult. Along similar lines, the interaction of friendship type and early concern that the friend's social circle (rather than one's own) would make a friendship difficult predicted concern for difficulties due to different ethnicity. In addition, the interaction between friendship type and recalled initial nervousness when interacting with one's then potential friend predicted initial concerns about different personal interests, as well as an impact on concerns about having different political viewpoints. The interaction of friendship type and role of trust development served as a significant predictor of comfort being one's "self" in friendship development, and current amount of time spent with one's friend.



Furthermore, the interaction of friendship type and realizing that one's friend would not judge them had a significant relationship to the welcoming nature of the friend, perceptions that the friend possessed favorable personal qualities, as well as the current friendship variables of the sharing of personal information, feeling close to the friend, believing one is important to the friend, believing that the friend cares, the friend asks for details about important life issues, and believing that the friendship will continue. I also found that the realization that friend respected one's views interacted with friendship type to predict current feelings of closeness, that the friend cares, and that the friendship will continue into the future.

#### Summary of Findings: Early Friendship Processes

To summarize, perceived similarity early in the relationship was particularly important to cross-race friends as compared to same-race friends, as it was more associated for cross-race friends both with early relationship trust and also current feelings of the importance of one's friend. Early "welcoming" (i.e. making one feel "welcome" and "included") of one's friend was also quite important to cross-race as compared to same-race friendship participants, as it related to both early trust and current inclusion of other in the self. Early concerns about various potential differences with friend, as well as the early realization that the friend would "not judge" were related to several early and current friendship variables among both cross-race and same-race friends. However, the associations between these variables generally played a larger role in cross-race friendship formation.

#### Current Friendship Variables: Regression Analyses

Finally, I carried out a series of regression analyses testing whether the two groups differed in the associations among variables which assess the participant's current attitudes about the relationship (See Table 5). The two groups differed in the association of feeling that one's friend is unique with importance of the friend to the participant, that the friend also finds the participant important, feelings of closeness, feelings that the friend cares, the friend's inquiring about details in one's life, and that the friendship will continue. Furthermore, differences were observed, between the groups (cross versus same-race friendships) with regard to associations between telling one's friend personal information and perceived importance self to the friend, feeling close to one's friend and importance of friendship to the participant, and inclusion of the other (friend) in the self significantly with both warmth for friend, and the feeling that one is important to the friend. Finally, an interaction of friendship type and friend's inquiring about one's life significantly predicted one's caring about their friend, feeling close, that one is important to the friend, and feeling that the friendship would continue.

#### Summary of Findings: Current Friendship Processes

In summary, one's feeling that that their friend is "unique" and "not like other friends," although a significant variable in both types of friendships, plays a larger role in cross-race relationships, as it is related to several friendship maintenance variables such

as closeness, and importance of one's friend. Similarly, although being important factors to both same-race and cross-race friendships, several current intimacy variables, such "personal information sharing" (i.e. self-disclosure), inclusion of other in self, and friend inquiring about one's life, all have larger associations to other friendship maintenance variables among those in cross-race friendships.

When looking at basic differences between cross-race and same-race friendships on a host of current friendship variables, many differences emerged. For example, cross-race friendship, although more frequently reporting that their friend is "kinder than most people," reported less "history" with friend, and more concerns about the dissolution of the relationship. Cross-race friends also reported less warmth, closeness, inclusion of other in the self, and belief that the relationship would continue than their same-race counterparts.

Research Question Three: What role does group membership play at each level of the friendship process? The remainder of the results presented are regarding the influence of group membership variables (e.g. intergroup anxiety, salience of group memberships, involvement in ethnic social or activity groups) and intergroup attitudes. For this reason, the following analyses involve only those participants who answered the survey about a friend of another race ( $n = 143$ ).

The focus of research question three was in examining the potential role that group membership might play in the early stages of a cross-group friendship, as well as in current friendship processes and intergroup attitudes. I first describe results of analyses including all participants (majority and minority), and at the end of this section I will describe some significant regression interactions revealing how some processes differ between majority (i.e. white) and minority (i.e. non-white) participants.

Intergroup anxiety (See Table 6) was found to have a negative relationship with choice in initial interaction, was associated with the early concern that cultural or ethnic backgrounds would be too different for friendship, and was negatively related to early honesty between potential friends. Intergroup anxiety was not found to be related to current friendship attitudes. I also examined the relation of intergroup anxiety to other group membership variables. Interestingly, intergroup anxiety was found to be related to early racial group salience, but not current racial group salience. It was also negatively related to previous intergroup contact, currently understanding the views of the friend's group, and current perceptions that interactions with the friends outgroup family members and friends go well.

Amount of group membership salience at the early stage of the friendship (See Table 6) was assessed by asking participants how much they "noticed" their friend's ethnicity during their very first interactions. Early group salience was found to be associated with early concerns about having different ethnic or cultural backgrounds, and also with current group salience, and how often friends currently discuss issues relating to their group memberships. Surprisingly, early group salience was negatively associated with the amount of time one currently spends with their outgroup friend's outgroup

family or friends, and also with how well these meetings go. Early group salience also had a negative relationship with current feelings of warmth for friend.

Current group membership salience (See Table 6) was related to early concerns about backgrounds being too different, personalities being too different, and religious beliefs being too different. It also had a negative association with relationship development via trust. Current group salience was also found to be related to how often the friend currently attends events relating to his or her ethnic background, has current discussions concerning group memberships, and how often there are explanations about issues relating to either person's racial group. Current group salience was also negatively related to meetings with the outgroup friend's family or friends (of his or her same race) going well.

Beliefs about how much one's racial group has ever been the target of prejudice (See Table 6) was negatively related to the early friendship variable of friend having "a lifestyle I'd be proud to have." It was also related to how often the friend currently joins the participant in group-related events, yet it had a negative relationship to the one's belief that their friend understands the views and behaviors of one's racial group. Beliefs about how much one's racial group has ever been the target of prejudice was also associated with how much the participant views the group of their friend as being the target of prejudice.

How much the participant views their outgroup friend as having ever been the target of prejudice (See Table 7) was associated with the early friendship variable of outgoingness of friend, and the realization that the friend respected one's views about things. This variable was also associated with currently considering the friend a unique person, caring about the friend, believing that the friend trusts one's self, as well as the friend's current attendance of events relating to their background, current group membership-related discussions, and how much the friend currently understand one's own group.

Belief that the friend is like other members of his or her racial group (See Table 7) was related to the early friendship variables of concern that backgrounds may be too different, and beginning to help each other. It was also associated to beliefs about the friend's current closeness to family and friends of his or her background, and the friend's involvement in events relating to his or her background.

Spending time with the family and friends of one's friend (who share the friend's background; See Table 7) was related to the early development of trust, early sharing of personal information (i.e. self-disclosure), and feeling that the individual had a lifestyle that the participant would be proud to have. It was also related to perceptions that the friend's outgroup family and friends are supportive of the relationship, that one's own family and friends are supportive. It is associated, current inclusion of other in self, trust, and the belief that the friend cares.

Finally, the participant's degree of ethnic identity (See Table 7) was related to length of time it took to share personal information, feeling that one's then potential friend was unique from his or her other friends, initial feelings of nervousness when interacting with one's then potential friend, and friendship development due to realizing

that one's friend respected their viewpoints. It was also related to current discussions with friend relating to group membership, explanations about group views and behaviors, perceived supportiveness of one's own friends and family, as well as the supportiveness of the friend's same-race friends and family members.

#### Summary of Findings: Group Membership and Friendship Variables

This section summarizes some of the key findings regarding group membership and friendship variable associations. Intergroup anxiety was related to early concerns about cultural differences, and negatively related to choice in initial interaction and early honesty between friends, and understanding the views of one's group. Early group salience ("noticing" group membership) was related to early concerns about cultural differences, to current group salience, and was negatively related to current time spent with friend's outgroup friends and family, and current feelings of warmth for friend. Current group salience was related to discussions and explanations with friend relating to group membership, and was negatively related to meetings with outgroup friends and family going well.

Furthermore, belief about one's own group ever being the target of prejudice was negatively related to one's belief that their friend understands the views and behaviors of one's racial group. Belief that the group of the friend was the target of prejudice was related to early-stage realization that friend respected one's views, current group-related discussions, and current perception of how much the friend understand one's own group. Belief that one's friend is different from other members of his or her group was related to early concerns about having different backgrounds. Spending time with outgroup friends and family was related to early self-disclosure and trust, and current inclusion of other in self. Ethnic identity was associated with amount of time it took for one to share information with their outgroup friend, realization that friend respected their viewpoints, and is related to current explanations about the viewpoint's of one's group, and perceptions that one's and friends social circles are supportive of their cross-group relationship.

#### Group Membership, Friendship Variables & Majority Group Status

I carried out a series of regression analyses investigating the potential interaction of majority status (i.e. white) versus minority status (i.e. non-white) of participants on the relationship between friendship and group membership variables. Using a dummy coded variable to represent majority versus minority status, differences in relationships between several variables of interest emerged (See Table 8). A significant interaction between majority status and early perceived similarity significantly predicted early realization that one's friend wouldn't judge them. In addition, majority group status interacted with perceived early welcoming nature of friend to predict early nervousness (less). Also, majority group status interacted with early concerns about ethnic differences in predicting friendship development via self-disclosure. Ethnic Identity interacted with majority group status interacted to predict early concern that one's social circle would make the relationship difficult. Finally, majority group status interacted with perceptions of

supportiveness of one's family and friends regarding their cross-race friendship, to predict level of current trust for friend.

Research Question Four: What is the relation of early and later interpersonal processes, and of group membership variables, to intergroup attitudes? This final section describes relationships found between the many friendship development and maintenance variables, group membership-related variables, and intergroup attitudes. Because all intergroup attitude variables but feeling thermometer and bias were associated with at least one of the Plant & Devine (1998) social desirability items ("stereotypes are wrong" and "I try to appear non-prejudiced"), bivariate correlations below are also presented with partial correlations which partial out the influence of social desirability.

In addition, I ran several regression analyses searching for potential interactions of majority status (i.e. using dummy coding for white versus non-white cross-race friendship participant) and several group membership variables thought to perhaps have a differential impact on attitudes. Specifically, I investigated the potential interaction of majority status with: nervousness at first interaction, perceived trustworthiness of friend, early and current group salience, perceptions of one's own group and friend's group having ever been the target of stereotypes, frequency of discussions relating to race, frequency of interactions with outgroup friends and family of one's friend, and ethnic identity. None of these variables interacted with majority status to indicate a differential impact on intergroup attitudes.

#### Associations between Friendship, Group Membership & Intergroup Attitudes

The following correlational analyses were run on the full sample of cross-race friendship participants. Feeling thermometer rating (warmth) for the friend's outgroup (See Table 9) was related to early perceptions that one's friend was a warm and kind person, and had a lifestyle that the participant would be proud to have. Warmth was negatively related to early concerns that lifestyles or cultural backgrounds would be too different for the friendship to develop further, and was associated with friendship development via the building of strong trust. Regarding variables relating to group membership, interestingly, warmth for the outgroup was found to have a negative association to current racial group salience (i.e. noticing different group memberships), and frequency of discussions about issues pertaining to group memberships.

Bias (greater warmth felt for own group above all other outgroups; See Table 9) was related to early beliefs that ethnic or cultural backgrounds would be too different for a friendship to form, and that others in the friend's life might also make it difficult. Bias was not found to be related to current friendship attitudes or group membership variables in the current investigation.

Ratings of subtle prejudice (high scores indicating admiration and sympathy) for the outgroup of one's friend (See Table 9) was related to early perceptions that the then potential friend was unique and different from one's other friends, and that the friend had a lifestyle that the participant would be proud to have. It was also associated with friendship development via beginning to help each other, being comfortable with each

other, honesty, understanding each other, and the development of trust. Subtle prejudice was also associated to many current friendship variables, for example, it was related to the belief that one's friend is a unique person, importance of the friend, trusting the friend, believing the friend trusts the participant, feeling close, and feeling that the friendship will likely continue.

Subtle prejudice also had many associations with group membership variables, such as the belief that the friend's group has been the target of prejudice, frequency of discussing group-related issues, belief that the friend understands and respects one's group, one's understanding of the outgroup's views, previous contact and closeness to other members of the group, interactions with friend's outgroup family members and friend's going well, and the support of one's own friends and family regarding the cross-race relationship.

Empathy ("feeling for" and "understanding") for the outgroup of one's friend (See Table 10) was associated with one's then potential friend being welcoming, seeming like a warm and kind person, seeming outgoing, and having a lifestyle that the participant would be proud to have. Empathy was also related to friendship development via beginning to help each other, being comfortable with each other, being honest, understanding each other, and the building of trust. It was also associated with early realizations that the potential friend wouldn't judge, and that he or she respected the participant's viewpoints. Empathy was also found to have many significant correlations with current friendship variables, including uniqueness of friend, importance of friend to the participant, the friend's telling the participant that he or she cares, one's trusting the friend, believing that the friend trusts the participant, and feeling that the friendship will likely continue.

Finally, regarding group membership variables, empathy for outgroup was related to many variables (See Table 10), including belief that the friend's group has been the target of prejudice, that the friend understands the views of one's group, that the friend respects one's group, that the friend is like other members of his or her group, one's spending time with the friends outgroup family and friends, perceptions of the friend's closeness to these individuals, and support from one's own family and friends regarding the interracial relationship.

Perceived similarity between one's ingroup with the friend's outgroup (See Table 10) was related to perceptions of similarity to the individual friend early in the relationship, as well as having a negative relation to concerns that ethnicity or culture may be too different for the relationship to develop. Perceived similarity of groups was not found to be related to current friendship attitudes in the current study. Regarding group membership variables, perceived group similarity was negatively related to early racial group salience but not to current group salience. It was also related to feeling that one's friend is like the other members of the friend's racial group.

Belief that there is some truth in the stereotypes about the group of one's friend (See Table 10) had a negative association with starting to help each other early in the relationship. Belief in stereotype truth was not found to be related to current friendship attitudes. Regarding group membership variables, stereotype belief was found to be

related to the belief that one's own group has been the target of prejudice. It was also related to previous contact with members of the outgroup and to previous closeness to outgroup members after partialing social desirability out of the equation. Belief in stereotype truth was also related to the current spending of time with outgroup family and friend's of one's friend.

#### Summary of Findings: Attitude, Group Membership & Friendship Variables

Overall, there were many associations between friendship, group membership, and attitude variables; this was especially the case for respecting one's individual viewpoints, as well as understanding and respecting the views of one's group.

To summarize the key findings of this section; current feeling thermometer scores for the group of one's friend were related to many variables, including friendship development via strong trust, and, interestingly, negatively associated to current racial group salience in the relationship. Bias for one's own group was related to the early belief that others in the friend's life might make the friendship difficult, but not to current friendship or group membership variables. Subtle prejudice (warmth and admiration for outgroup) was related to both early and current friendship variables, as well as the belief that the friend's group has been the target of prejudice, and that the friend understands and respects one's group. Empathy ("feeling for" and "understanding") for the outgroup of one's friend was also associated with several variables, including the early realization that friend respected one's views. Empathy was also related to the current friendship variables of friend's telling one that he or she cares, and trusting the friend. Regarding group membership variables, empathy for friend's group was related to the belief that friend understands and respects one's own group, as well as the belief that friend's group has been the target of prejudice. Perceived similarity between one's ingroup with the friend's outgroup was related to perceptions of similarity to the individual friend early in the relationship, but was not found to be related to current friendship attitudes in the current study. Belief that there is some truth in the stereotypes about the group of one's friend had a negative association with starting to help each other early in the relationship, but was not found to be related to current friendship attitudes.

#### Using Exploratory Factor Analysis to Examine Broad Patterns of Results

In order to better identify patterns in the correlations observed among the many variables in the current study concerning research questions two through four, a series of exploratory factor analyses were conducted. Variables were broken into the following subsets for factor analysis: early friendship variables, current friendship variables, and variables relating to group memberships. Factor analyses for each of the previous subsets were then run separately for those in cross-race and same-race friendships; this was done so that patterns in variable relationships that were present in both groups of participants could be observed. If these similar variable groupings made conceptual sense, the mean for all variables making up the factor was calculated, thus creating a new factor for further analysis. On the basis of this series of factor analyses, which used promax factor rotation, four factors were identified for early friendship processes, two were identified

for current friendship processes, and four were identified among the group membership variables.

#### Factors

The early friendship factors discovered were, first, what I call “early friendship bond” which is the mean of friendship development through early trust, honesty, respect, no judgments, understanding, helping, feeling comfortable, and self-disclosures. This factor contributed about 24.2% of the total variance and had an alpha rating of .89. The second factor identified was “positive friend characteristics” including perceptions of how outgoing, welcoming and warm the potential friend during early interactions. This second factor contributed about 14.4% of the total variance and had an alpha rating of .91. Finally, “identity differences” were concerns about being too different with regard to religion, political views, financial status and culture (8.4% of variance; .77 alpha rating), whereas “personality differences” were concerns about being too different with regard to individual personality and lifestyle (8.4% of variance; .87 alpha rating).

The current friendship factors identified include what I call the “current affective bond” which includes feelings that participant is important to the friend, that friend cares, friend is important, that participant cares, feeling of closeness to friend, warmth for friend, self-disclosure to friend, and belief in the future of the friendship (51.8% of variance; .96 alpha rating), and the second factor was “current friendship actions” and includes variables assessing friend’s helping, asking one about issues, asking one about life details, communication between friends and spending time together (14.2% of variance; .89 alpha rating).

Finally, the first of the four group membership factors that emerged was “family role” which included variables assessing support for the cross-group friendship from the outgroup friend’s family, support from one’s own family, spending time with the outgroup members (OG) family and friends, and how well those interactions go (21.5% of variance; .83 alpha rating). The next factor was “involvement in outgroup and ingroup activities” which included the measures of how often one joining the friend in outgroup-related activities, as well as how often the friend joins the participant in ingroup-related activities (15.6% of variance; .75 alpha rating). The third factor was “intergroup communication” which includes the assessments of how often discussions and explanations relating to group membership take place (9.2% of variance; .83 alpha rating). Finally, the “intergroup sensitivity” factor combines assessments of friend’s understanding and respect for one’s own group (6.5% of variance; .64 alpha rating).

Research Question Two: How do early cross-group relationships, as compared to same-race relationships, progress to friendships, and what factors play a role in maintaining these friendships? I first investigated whether any significant differences by friendship type (same-race versus cross-race) were present in the overall means of the new factors. The only significant t-test was for current affective friendship bond, of which there was a higher level reported by same-race friends ( $M = 6.25$ ,  $SD = 0.95$  as compared to  $M = 5.82$ ,  $SD = 1.24$ ;  $t [293] = 3.40$ ,  $p < .01$ ).



Several interactions between friendship type (same-race versus cross-race) and the newly created factors predicted other new factors, suggesting a significant difference in the association of these factors by friendship type (See Table 11). Early bond and friendship group type significantly predicted early friendship characteristics, early personality differences, and current friendship bond. Friendship type interacted with early perceived friendship characteristics to predict current friendship bond, and with early concerns about identity differences to predict early concerns about personality differences. Friendship type also interacted with early concerns about personality differences to predict current friendship bond, and with current friendship actions to predict current friendship bond.

Research Question Three: What role does group membership play at each level of the friendship process? I then investigated relationships between the new friendship factors, and the new group membership factors among the participants in cross-race friendships (See Table 12). I found that the “role of family” factor related to early friendship bond, current affective bond and current friendship actions. The “involvement in group activities” factor related both the current affective bond and current friendship actions, while “intergroup communication” was also associated with current friendship actions. The “intergroup sensitivity” of one’s OG friends was related to early bond, early friend characteristics, and current affective bond, and was negatively related to early concerns about differences in identity and in personality.

Research Question Four: What is the relation of early and later interpersonal processes, and of group membership factors, to intergroup attitudes? Finally, I examined the association of these new factors to intergroup attitudes among those in cross-race friendships (See Table 13). “Early friendship bond” was related to both subtle prejudice (i.e. sympathy and admiration) and empathy for outgroup, as was “current affective bond.” “Early positive friend characteristics” was related to empathy, and “intergroup communication” was related to feeling thermometer for the outgroup. The “role of families” was related to feeling thermometer, perceiving some truth in stereotypes, subtle prejudice, and empathy for the outgroup. Finally, the perceived “intergroup sensitivity” of one’s friend was related to both subtle prejudice and empathy for the group of one’s friend.

#### Summary of Study One Findings

To summarize, results from the retrospective study suggest that cross-race friends were more likely to meet via a shared environment (e.g. roommate assignment, classroom) whereas same-race friends more often met via mutual friends. There were no differences between friendship type (same-race versus cross-race) in recollections of initial concerns or positive perceptions of friend, but there were significantly greater reports of current affect and self-disclosure among those in same-race friendships. Despite this, the friendship processes within cross-race friendships appeared to be more often intercorrelated; processes relating to the friend’s early involvement and concern for

the participant were associated with current feelings that friend cares and that the friendship would last. Focusing the final analyses on cross-group friendships, intergroup anxiety was found to have a negative relation to early honesty among friends, but had no relation to current friendship variables. Interactions with friend's outgroup family and friends related to positive intergroup attitudes, as did feeling that the friend understands and respects one's own group. Finally, the development of trust, understanding, and feeling close all had positive associations to attitudes about the outgroup.

The first study revealed many important insights regarding the interpersonal processes of cross-group friends. The retrospective nature of the study, however, makes evaluating the development of these processes a bit difficult. Therefore, the second study was longitudinal so that some clarity of the development of interpersonal processes could be obtained.

#### **IV. Study Two**

In study two, the current research questions were investigated using longitudinal means. The benefit of this study, therefore, was that factors relating to the early processes of friendship development would be fresh in the minds of the participants, and thus less susceptible to biases in memory. In addition, the ability to assess key variables at multiple time points allows for a clearer picture of how associations between factors begin to change as the relationship progresses.

##### **Method**

###### **Participants**

Participants were 72 undergraduate university students enrolled in an introductory psychology class. At the final point in the longitudinal study, 21 students were dropped from the final analyses due to ultimately not becoming friends with the individual about whom they had been answering the surveys. This resulted in the final sample of 35 participants having made a cross-race friend, and 16 participants having made a same race friend. Of these remaining 51 participants, 6 were African American, 15 were Asian, 4 were Hispanic or Latino, 25 were white, and 5 were of other ethnic backgrounds. The ages of the participants ranged from 17 to 21 years old, with a mean of 18.47 years old.

###### **Questionnaire**

Each semester, students in introductory psychology are offered a chance to participate in a "mass testing" session in which research credit is given in exchange for the completion of several surveys. The first of the three longitudinal surveys in this study

was distributed to participants in mass testing. For this initial survey, items were broken up to look like two separate studies such that the questions pertaining to friendship and group membership were on one questionnaire, and the study questions pertaining to intergroup attitudes were on a second questionnaire. At the two later time points in the study, surveys were made available to students online using the psychology department's internet survey system (SONA Systems). In these surveys, which had slightly more items due to a longer allowance of time for one to participate (30 minutes as compared to the 15 in mass testing), items were presented such that questions regarding one's developing friendship were presented first, followed by group membership items, and finally by intergroup attitude items. To help hide the true nature of the study, several feeling thermometer items, which were the first attitude items presented in the intergroup attitudes section, inquired about social groups that were not of interest in the current study (e.g., religious and political groups), leaving the intergroup attitude items of interest in the latter portion of that section of the survey.

#### Survey Items (See Appendix 2)

All items were answered on a 7 point likert-type scale unless noted. The first set of items inquired how the individual met his or her friend (Time 1 only), the degree of friendship they consider the person to be at the moment, amount of choice in first interacting (Time 1 only), amount of conversations in the past month, amount of time spent together in the past month, how much one enjoys spending time with the friend, closeness to individual, liking of individual, perception of individual's uniqueness, depth of intimacy (i.e. degree of personal information shared), how much one would miss the individual, likely future of relationship, perceived similarity to individual on several variables (e.g. personality, values, social interests), feeling one could depend upon the individual, the individual's ability to make one feel comfortable, caring nature of individual, individual's ability to value the perspective of the participant, individual's concern for one's wellbeing, individual's trustworthiness, individual's ability to respect one "as a person", belief that one's social circle would (or do) like the individual, that one knows the individual well, that the individual knows the participant well, feeling that one is important to the individual, that the individual is fun, that the participant has taken part in a number of activities with the individual (e.g., shared private information, shared a meal, played sports or done an activity together; the alpha of a scale made of these items was .89).

The next set of items immediately followed the previous, and consisted of items relating to group membership issues. For those answering about a same-race friend, they were asked to insert a "4" for all of the items in this section. These items included; how often the individual interacts with one's family and friends, how much the individual has learned about one's group, one's respect for the individual's background, the individual's respect for one's background, one's interactions with the individual's (outgroup) family and friends, how much one has learned about the individual's group, belief that individual is different from most people in his/her ethnic group, belief that the individual's ethnic background plays an important role in his/her life, belief that the

individual is different from most people in his/her ethnic group, one's prior interaction experiences with the outgroup, one's previous friendships with outgroup members, salience (i.e., how much one thinks how groups are similar/different), belief that individual has a unique perspective due to group membership, one's appreciation for that perspective, belief that different background play a role in the relationship, and feeling that one is "different" from other members of the ingroup.

As in study one, ethnic identity was assessed using three items from the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). In the current study, the alpha reliability of these items was .62. The Ten Item Personality Measure (TIPI; Gosling et al., 2003) was used to assess the Five-Factor model of personality dimensions. The final section of survey questions were concerning one's intergroup attitudes; all measures were identical to those used in study one. Items for all participants were regarding four specific target groups: people with African backgrounds, Asian backgrounds, European backgrounds (i.e. white), and those with Latino backgrounds. For cross-race participants, one's attitudes were assessed using rating for the outgroup belonging to their friend. For same-race participants, attitudes were calculated by averaging feelings for all but the individual's racial group (e.g. a white participant's sympathy score would be the average of their sympathy ratings for Africans, Asians and Latinos). For those same-race friendship participants having a background other than one of the four target racial outgroups, ratings for all four target outgroups were combined for a total assessment of intergroup attitudes.

Unless otherwise noted, all scales were presented on a 7-point likert-type instrument. For all items, higher numbers indicate a higher level of that variable, whether for a positive variable (e.g. "empathy") or a negative variable (e.g. "anxiety"). Intergroup attitude items in study two were; as in study one, a "feeling thermometer" used to assess warmth for outgroup, an assessment of bias was created by subtracting one's feeling thermometer rating for their own racial group from the average of their ratings for outgroups, the two items from Pettigrew and Meertens (1995) Subtle Prejudice Scale ("sympathy" and "admiration" for outgroup) were again assessed (in the current study, these items were kept separate for analysis rather than being combined, as a preliminary examination of correlations involving these items revealed unique patterns), beliefs about the amount of truth in common stereotypes about outgroup(s), and the single-item intergroup anxiety assessment. Finally, the same two items used to assess social desirability in study one were administered in study two (Plant & Devine, 1998).

#### Procedure

Each semester, students in introductory psychology are offered a chance to participate in a "mass testing" session in which research credit is given in exchange for the completion of several surveys. The first of the three longitudinal surveys in this study was included in mass testing, which occurred about five weeks after the beginning of the semester. Students reporting having met a potential cross-race or same-race friend within the previous month of the mass testing session and who were interested in future research opportunities were contacted a few weeks later via email. Individuals were invited to take part in two additional 30 minute surveys to receive either a payment of \$10 or one

research credit. These later surveys were offered online using university internet-based survey software. These surveys contained some additional items not appearing in the survey at Time 1 given their ability to be a bit longer in length. The second survey was made available about 5 weeks after the mass testing session, and the final survey was made available about 5 weeks following the second.

## Results and Discussion

Research Question One: How do cross-group race friendships begin? How does this compare to the formation of same-race friendships? In examining the circumstances under which friends met, it was found that those making a same-race friend more often met the individual through a mutual friend (31%), or “other” means (31%) rather than via a shared class (19%), random roommate assignment (13%) or university club (6.3%). Conversely, those making a cross-race friend were instead more likely to meet through random roommate assignment (40%) or in a class (23%) rather than via mutual friends (14%) a shared club (5.7%) or “other” means (17%). A chi-square analyzing friendship type (same-race versus cross-race) and meeting type (roommates, mutual friends, shared class, shared club or “other”) was non-significant ( $\chi^2 [4, N = 35] 5.4, p = .25$ ). However, a second chi-square including just the meeting categories of “roommates” and “mutual friends” was significant, with cross-race friends having a higher percentage of “roommate” first meetings and same-race friends having a higher percentage of “mutual friend” first meetings ( $\chi^2 [1, N = 35] = 4.4, p < .05$ ).

### Summary of Findings: Circumstances of Meeting Friends

In summary, results indicate that same-race friendships more often develop due to mutual friends, whereas cross-race friendships more likely start in situations of environmental contact, such as roommates or in a class at school. This pattern of results was virtually identical to what was found in the retrospective study; same-race friends were also more likely to meet via mutual friends than were cross-race friends.

Research Question Two: How do early cross-group relationships, as compared to same-race relationships, progress to friendships, and what factors play a role in maintaining these friendships? As in the first study, a basic analysis of difference between friendship type (same-race versus cross-race) in means of friendship variables was examined (See Table 14). At each of the three time points I looked at means of enjoyment of time spent with friend, closeness to friend, liking of friend, self-disclosure, trust for friend and perception of friend’s dependability. Only two significant differences were observed; there was greater depth of self-disclosure among those with same-race friends at time points one and three. Interestingly, there was no difference between friendship groups at the second time point.

When comparing this pattern of findings to those in the retrospective study, I found that self-disclosure was also a variable that occurred at higher levels among those in same-race friendships than cross-race friendships. Additional differences between

friendship type in current levels of warmth, closeness and inclusion of other in self were discovered in the retrospective study.

#### Regression Interactions: Time One

Differences between friendship type (cross-race versus same-race) in relationships of friendship variables were analyzed at each of the three time points. Within the parenthesis of the following results are, first, the significant regression interaction (partial  $r$ ), followed by the Pearson correlations for each friendship type, to aid in interpretation of the interaction.

At time one (one month or less since meeting one's potential friend; See Table 15), the interaction of friendship type (cross-race versus same-race) and enjoying time spent with friend predicted one's level of perceiving that they could depend upon their friend, feeling that their friend makes them comfortable, that friend is concerned for their wellbeing, perceived trustworthiness of friend, and the perception the one's social circle would like the friend. Furthermore, the product of friendship type and liking of friend found significantly predicted feelings that one could depend on their friend, that one's friend cares for them, and that they "respect them as a person." The interaction of friendship type (cross-race versus same-race) and time one comfort with friend was found to significantly predict belief that one's social circle would like the friend. Furthermore, the interaction of friendship type and time one perceived trustworthiness of friend predicted time one liking of the friend, while perceived similarity in values interacted with friendship type to predict trustworthiness of the friend.

#### Regression Interactions: Time Two

At time two (about mid-semester; See Table 16), the interaction of friendship type (cross-race versus same race) and enjoyment of time spent with friend significantly predicted feeling that one is important to the friend, as did the interaction of friendship type and liking friend. The interaction of friendship type and depth of intimacy (i.e. "how personal is the most personal thing you've shared") significantly predicted one's belief that their social circle would like the friend. Perceived similarity of financial status interacted with friendship type to predict feelings that friend respects one as a person, and the perceived trustworthiness of one's friend. Perceived similarity in social interests interacted with friendship type to predict perceptions that friend values one's perspective.

#### Regression Interactions: Time Three

At time three (about the end of the first university semester; See Table 17), an interaction between friendship type (cross-race versus same race) and depth of intimacy significantly predicted ability to depend on one's friend, as well as perception of friend's concern for one's wellbeing, and degree of how much one would miss their friend if they could no longer see each. An interaction between friendship type and one's perceptions that friend has similar values significantly predicted perceptions of friend's concern for one's wellbeing, and that the friend knows the participant well. Finally, the interaction of

friendship type and closeness to friend at time three predicted one's depth of intimacy with their friend.

#### Summary of Findings: Single Time Point Friendship Processes

To summarize, time one enjoyment of spending time with one's friend, liking one's friend, comfort with one's friend, and trustworthiness of friend were all more strongly associated with many other time one friendship variables for those in cross-race rather than same-race developing friendships. For only same-race friends, perceived similarity in values at time one had a significant relationship with perception that one's social circle would like the friend. At time two, enjoyment of time spent with friend and liking of friend again had stronger relationships with other (time two) friendship variables for those in cross-race developing friendships, while depth of self-disclosure, and several perceived similarity variables were important predictors of other time two friendship variables among just those in developing same-race friendships. At time three, depth of self-disclosure had a significant impact on other time three friendship variables among cross-race rather than same-race friends, as did perceived similarity in values and closeness to friend.

#### Regression Interactions: Friendship Variables across Time

In addition to examining different patterns in the associations of friendship variables between cross-race and same-race friends at single time points, I also examined the relationship between variables at earlier and later time points.

Several relationships were found between variables at time one and time two (See Table 18). For example, the interaction of friendship type (cross-race versus same-race) and perceptions of friend's respect for one "as a person" at time one was found to be a significant predictor of feeling that one could depend upon the friend at time two. The interaction of friendship type and feeling that the friend values one's perspective at time one significantly predicted amount of time spent together at time two. The product of friendship type and time one feeling that one can depend on their friend significantly predicted liking at time two, while the interaction of friendship type and time one perceptions of friend's concern for wellbeing predicted time two depth of self-disclosure with one's friend. Meanwhile, the interaction between friendship type and closeness at time one significantly predicted perceived trustworthiness of friend at time two, which was also predicted by friendship type and enjoyment of time spent with friend at time.

There were also several significant interactions between friendship type and time one variables in predicting time three variables (See Table 19). Perceived similarity between one's and friend's environment while growing up (i.e. background) at time one interacted with friendship type (cross-race versus same-race) to predict both time three closeness to friend and perceived trustworthiness of friend. In addition, many time three friendship variables were predicted by the interaction of friendship type with time one perception that friend cares, including time three belief that friend values one's perspective, time three ability of friend to make one feel comfortable and at ease, time

three feeling that one is important to the friend, and time three belief that one's social circle would (or does) like the friend.

Finally, there were also many significant regression interactions between friendship type (cross-race versus same-race) and time two friendship variables that predicted friendship variables at time three (See Table 20). The interaction between friendship type and depth of self-disclosure at time two predicted how much one would miss their friend at time three if one couldn't see or speak to their friend for a month. The interaction between friendship type and time two belief that the friendship would last into the future predicted the time three spending of time with one's friend. The interaction between friendship type and how often one shared private information at time two significantly predicted one's time three belief that the relationship would last. Finally, the interaction between friendship type and perceived similarity in values at time two significantly predicted time three comfort, as did the interaction of friendship type with time two perceived personality similarity.

#### Summary of Findings: Friendship Variables across Time

Among cross-race participants, Time 1 perceptions of friend's respect for one "as a person," valuing one's perspective, dependability and concern for wellbeing all related to Time 2 friendship variables more strongly than among same-race participants. On the other hand, Time 1 closeness and trustworthiness had a greater impact on Time 2 variables among same-race friendship participants. In terms of the influence of Time 1 variables on Time 3 variables, perceived similarity at Time 1 was more often a significant predictor of Time 3 friendship processes among same-race friends, whereas perception that the friend cares was a significant predictor of many Time 3 friendship variables among those in cross-race developing friendships.

It is important to note the similarities in the pattern of significant regression interactions occurring in both the longitudinal and retrospective studies; for each of the following interactions, relationships between variables were significantly stronger among those participants in cross-race friendships. Similar to the current study's finding that friend's respect for one as a person at time 1 predicted perceptions that friend cares at time 2, the retrospective study revealed that feelings that friend respected one's views early in the relationship were related to one's current perceptions that friend is dependable. In addition, the current study found that belief that friend cares at time 1 related to time 3 feelings that one is important to the friend. In the retrospective study, frequency that friend inquires about one's life was related to feelings that one is important to their friend. Finally, the current study found that frequency of self-disclosure at time 1 related to one's beliefs that the friendship would last into the future at time 3; similarly, the retrospective study found that frequency that friend inquires about one's life was related to one's beliefs that the friendship would last into the future.

Overall, the findings of both studies were that friend's respectfulness, and concern for issues in one's life related to other interpersonal variables to a greater degree among cross-race friends than among same-race friends.



Research Question Three: What role does group membership play at each level of the friendship process? The aim of the third research question was to gain an understanding of the relationship that several group-membership related variables had with friendship variables at each stage of friendship development. My analysis strategy was therefore to examine relationships between group-related and friendship variables at each of the three time points in the current study. These analyses were conducted on the 35 participants describing the development of a cross-race friendship.

#### Time 1 Relationships between Group-Membership and Friendship Variables

At Time 1, several significant relationships between group-membership variables and friendship variables were found (See Table 21). For example, perceiving one's potential friend as having respect for one's ethnicity was related to early beliefs that the individual could be depended upon, making the participant feel comfortable, and that one's social circle would also like the potential outgroup friend. Interacting with the outgroup family and friends of one's potential friend was related to spending time with the potential friend, feeling that one knows the friend, that the friend also knows the participant, and that one is important to the friend. Learning new things about the group of one's potential friend was associated with frequency of having conversations with one's friend, spending time with the friend, feeling close to the friend, the depth of self-disclosure (i.e. "how personal is the 'most personal' thing you have shared?") with friend, feeling that one knows the friend, that the friend also knows the participant, and that one is important to the friend. Belief that group membership plays an important role in the friend's life was associated with perceptions that friend respects one "as a person," and that one's own social circle would like the potential friend, and that one is important to the friend. Finally, one's belief that the friend is different from most others of his or her group was related to one's belief that the friend value's ones perspective.

Time 1 group membership variables were also found to be associated with friendship variables at later time points (See Table 22). Time 1 interactions with outgroup friends and family of the friend were associated with knowing the friend at Time 2, feeling that friend knows one's self at Time 2, and was negatively associated with Time 2 belief that the friend is different from others in his group. Belief that friend's group membership is important to the friend at Time 1 was related to Time 2 perceived similarity in values, and Time 2 belief that the friend respects the participant.

#### Time 2 Relationships between Group-Membership and Friendship Variables

Many significant relationships between group-membership variables and friendship variables were also discovered at the second time point (See Table 23). Intergroup anxiety at Time 2 was negatively associated to several Time 2 friendship variables, including depth of self-disclosure, belief in the future of the relationship, missing the individual if one couldn't see them for a month, closeness to the friend, how often private information is shared, and frequency of conversation with friend. Belief that one's friend has learned new things about one's own group at Time 2 was related to missing the individual if one couldn't see them for a month, feelings that the outgroup member respects the individual "as a person," and that one knows the friend. Belief that

friend respects one's ethnicity at Time 2 was related to perceived similarity in personality and values. Spending time with the outgroup friends and family of one's friend was related to depth of self-disclosure with friend and knowing the friend. Viewing the friend as different from other members of his group was related to belief that the friend values one's perspective. Belief that group membership plays an important role in friend's life was related to perceived similarity in values. Finally, one's ability to appreciate their friend's "unique perspective due to their group membership" at Time 2 was associated with the perception that one's friend values the participants own viewpoints, and that the friend is concerned for the participants wellbeing.

Regarding the impact of Time 2 group membership variables on Time 3 friendship variables (See Table 24), it was discovered that Time 2 perception that friend respects one's own ethnicity was related to Time 3 liking of the friend, perceived value similarity, trustworthiness of friend, feeling that friend "knows" one, and that one's social circle would like the friend. Interacting with the outgroup friends and family of the friend at Time 2 was related to Time 3 level of disclosure intimacy, and perceived similarity of financial and political backgrounds. Believing that group membership plays an important role in friend's life at Time 2 was related to Time 3 belief that the participant was also important to the friend. Belief that the friend is "different than most" members of his or her group at Time 2 was related to Time 3 beliefs that friend respects one "as a person," and was negatively related to perception of financial similarity at Time. Time 2 belief that the friend has a "unique perspective" due to their group membership was related to Time 3 enjoyment of time spent with friend, and trustworthiness of friend. Finally, one's appreciation of friends "unique perspective" at Time 2 was related to finding the friend to be unique, the belief that the relationship will last into the future, and having a fun time when with the friend.

#### Time 3 Relationships between Group-Membership and Friendship Variables

Finally, Time 3 group membership variables were associated with many Time 3 friendship variables (See Table 25). Intergroup anxiety at Time 3 had a negative relationship to closeness, depth the "most personal" disclosure that the participant has shared with the friend, feeling that one would miss their friend if they could not see them for a month, "knowing" the friend well, believing that the friend knows one well, and how often private opinions are shared with the friend (i.e. self-disclosure frequency). The belief that one's friend learned new things about one's group was related to depth of self-disclosure, and the frequency of sharing of private opinions. One's respect for friend's ethnic background was related to closeness, perceived similarity in values, trustworthiness of friend, and belief that friend is concerned with one's wellbeing. Belief that the friend respects one's own group background was related to viewing the friend as caring, unique, and trustworthy. Interacting with friend's outgroup family and friends was related to the frequency of sharing private opinions with the friend, and closeness. Finally, one's appreciation for the unique perspective of their friend (due to friend's group membership) was related to missing the friend, perceived similarity in personality, trustworthiness of friend, and belief that friend is concerned for one's wellbeing.

### Summary of Findings: Group-Membership and Friendship Variables

To summarize, at Time 1, many associations were discovered between friendship and group membership variables. Key variables involved in these relationships included, at Time 1, friend's respect for one's ethnicity, interacting with outgroup friend's family and friends, and the association of learning new things about friend's group. At Time 2, key group membership variables relating to friendship variables included belief that friend respects one's ethnicity, as well as intergroup anxiety, which had negative relationships with the friendship variables. In addition, belief that the friend had learned new things about one's group was related to friendship variables at Time 3, as was the belief that friend respects one's background. Intergroup anxiety at Time 3 also had several negative associations with friendship variables.

Key relationships between group membership variables and friendship variables over time were, the association of Time 1 interactions with outgroup friend's family and friends with "knowing" the friend at Time 2, as well as being negatively related to one's Time 2 belief that friends is different from others in his or her group. Time 2 perception that friend respects one's ethnicity was related to Time 3 liking and perceived trustworthiness of friend, as well as perceived similarity in values. Interacting with friend's outgroup family and friends at Time 2 was related to self-disclosure at Time 3. Feeling that one could appreciate their friend's "unique" outgroup perspective at Time 2 was related to Time 3 trustworthiness of friend, and Time 3 belief that the relationship would last.

In comparing relationship between group membership variables and friendship variables across both the current and the retrospective studies, some noteworthy similarities emerged. First, intergroup anxiety was found to play a role in both studies in its relation to friendship variables; it had a negative relationship to self-disclosure at times 2 and 3 in the current study, and in the retrospective study intergroup anxiety was negatively associated with early honesty among friends. Furthermore, interactions with the outgroup friends and family members of one's friend were related to closeness and self-disclosure at multiple time points in the current study, while such interactions were also related to self-disclosure and inclusion of other in the self in the retrospective study.

The overall patterns across both studies were first, that intergroup anxiety has a negative relationship to processes that allow for the deepening of intimacy (i.e. honesty, self-disclosure) and second, that one's interactions with outgroup friends and family members relates to self-disclosure and affect between cross-race friends.

Research Question Four: What is the relation of early and later interpersonal processes, and of group membership variables, to intergroup attitudes? The final research question seeks to investigate possible relationships between group membership and friendship variables. As my interest was in seeing not only relationships between variables an single time points, but also in looking at how changes in friendship over time might impact attitudes, I calculated change scores in friendship variables by subtracting

an earlier score from a later score. These friendship changes scores were then used in correlations investigating their impact on attitudes at a later time.

Before analyzing the data, I first investigated the relationship between the social desirability items (Plant & Devine, 1998) and intergroup attitudes, and found that there were no significant relationships between these items in the current study.

#### Relationships between Friendship Variables, Group Membership Variables, and Intergroup Attitudes at Time 1

First, two significant relationships were discovered between Time 1 group membership variables and Time 1 intergroup attitudes (See Table 26). Feeling thermometer for the group of one's friend was related to interacting with the outgroup family and friends of one's friend, as well as one's previous experience interacting with members of the outgroup. When examining the relationship between Time 1 intergroup attitudes and Time 1 friendship variables (See Table 26), I found that feeling thermometer for the group of one's friend was related to frequency of conversations, degree of "personal" information ever disclosed to friend, perceived similarity in values, and knowing the friend. No friendship variables were related to sympathy or admiration for the group of one's friend at Time 1.

#### Relationships between Friendship Variables, Group Membership Variables, and Intergroup Attitudes at Time 2

Regarding relationships between group membership variables and intergroup attitudes at Time 2 (See Table 27), feeling thermometer rating was related to interacting with outgroup friends and family of the friend, as well as the participants prior intergroup contact. Admiration for outgroup was related to learning new things about the group because of the friend, and the belief that the outgroup friend learned new things about the participant's group via their friendship as well. This variable was also related to group salience (i.e. awareness of group memberships), and one's appreciation of friend's "unique outgroup perspective," and one's own ethnic identity. Sympathy for outgroup was related to ethnic identity. Finally, bias towards own group was negatively related to interacting with the friend's outgroup family and friends, previous contact with outgroup friends, and the belief that one is different from the other members of his/her ingroup.

Time 2 feeling thermometer rating for the group of one's friend was related to depth of intimate information shared with friend. Bias was also related to several friendship variables at Time 2, including depth of intimacy, belief that one's social circle would like the friend, knowing the friend, belief that friend knows the self, frequency of sharing private information, frequency of conversations with the friend, and spending time with the friend.

#### Relationships between Friendship Variables, Group Membership Variables, and Intergroup Attitudes at Time 3

An examination of the relationship between group membership variables and intergroup attitudes at Time 3 (See Table 28) revealed that feeling thermometer for one's

friend was related to perceptions that the friend respects one's ethnic background, that the friend has interacted with some of the participant's family and friends sharing the participant's race, perception that the friend already has friends from one's group, interacting with the friend's (outgroup) family and friends, learning something new about the outgroup because of one's friend, and appreciating the unique outgroup perspective of the friend. Admiration for the outgroup was associated with believing that the friend has learned something new about one's group via the friendship, and belief that group membership plays a large role in the friendship.

When looking at the relationship between friendship variables and intergroup attitudes at Time 3, I found that admiration for the outgroup of one's friend was related to the friend's ability to make the participant comfortable and at ease, the belief that the friend values one's perspective, perception that friend is concerned for one's wellbeing, and is trustworthy. In addition, bias for one's group had a negative relationship with missing the friend.

#### Relationships between Changes in Friendship Variables over Time and Intergroup Attitudes

Finally, I assessed whether changes in friendship variables between time points influenced intergroup attitudes at later time points (See Table 29).

Surprisingly, Time 2 feeling thermometer rating for the group of one's friend was found to be negatively related to several changes in friendship variables across Time 1 and two, including liking, perceived similarity in social activities, and belief that the friend can be depended upon. Admiration at Time 2, however, was positively related to increases in perceived similarity in social activities.

When looking at the relationship between change in friendship variables between Time 1 and Time 3, I found that admiration for the outgroup of one's friend was related to increases between Time 1 and Time 3 in amount of time spent with friend. In addition, sympathy at Time 3 was related to increases between times one and three in enjoyment of time spent with friend, as well as increases in one's perception that the friend knows them very well.

Finally, when investigating the relationship between friendship changes between times two and three and intergroup attitudes, I found that feeling thermometer rating for the group of one's friend at Time 3 was associated to positive change between Time 2 and three in belief that one's friend is concerned about the participant's wellbeing. In addition, I found that Time 3 admiration for outgroup was related to an increase in closeness over this Time 2 and Time 3. I also found that sympathy for the outgroup at Time 3 was associated with an increase in perceived similarity in values. Finally, lower amount of bias in favor of one's own group was related to increase in belief that one's friend is concerned about the participant's wellbeing.

#### Summary of Findings: Attitude, Group Membership & Friendship Variables

This section summarizes the key relationships between attitudes and other variables in the current study. At Time 1, feeling thermometer was associated with one's

interactions with friends (outgroup) family and friends, and depth of self-disclosure to friend. At Time 2, feeling thermometer was again related to one's interactions with friends (outgroup) family and friends, as well as depth of self-disclosure. Outgroup admiration was related to learning new things about the group, and also to the belief that the outgroup friend learned new things about the participant's group. Admiration was also related to one's appreciation of friend's "unique" outgroup perspective. Bias had a negative relation to the belief that one is different from the other members of his/her ingroup. At Time 3, feeling thermometer was again related to interactions with outgroup friends and family, and also to perceptions of respect for one's own ethnic group, and learning new things about the outgroup because of the friend. Admiration was related to several intimate friendship variables at Time 3, including feeling comfort, trustworthiness of friend, and friend's valuing of one's perspective.

There also were several associations of attitudes to changes in variables over time, including: feeling thermometer rating for the group of one's friend at Time 3 was associated to positive change between Time 2 and three in belief that one's friend is concerned about the participant's wellbeing. Also, Time 3 admiration for outgroup was related to an increase in closeness to friend between Time 2 and three.

Finally, several similarities in the patterns of associations between group membership variables, friendship variables and intergroup attitudes were found across the retrospective and current (longitudinal) studies. Regarding the association of group membership variables and intergroup attitudes, interactions with the outgroup friends and family members of one's friend were related to feeling thermometer ratings for the outgroup at every time point in the longitudinal study, and these outgroup interactions were related to sympathy and admiration (i.e. subtle prejudice) for the outgroup in the retrospective study. In addition, friend's learning about one's ingroup was related to admiration for outgroup at time 2 and admiration for outgroup and feeling thermometer for outgroup at time 3; similarly, friend's understanding of the ingroup was related to sympathy and admiration for the outgroup in the retrospective study.

Regarding similarities between the associations of friendship variables and intergroup attitudes across studies, several noteworthy patterns emerged. In the current (longitudinal) study, increases in feeling that the friend "knows" one from time 1 to time 3 related to outgroup sympathy at time 3; similarly, relationship development via mutual "understanding" related to outgroup sympathy and admiration in the retrospective study. Perceptions of friend's concern for one's wellbeing was related to admiration at time 3 in the current study; the development of trust related to sympathy, admiration and feeling thermometer rating for outgroup in the retrospective study. Finally, increase in closeness between times 2 and 3 in the current study was related to time 3 admiration for outgroup, while closeness was also related to admiration and sympathy for outgroup in the retrospective study.

The overall pattern of findings across both studies was: regarding group membership and intergroup attitudes, interactions with the outgroup friend's family and friends related to positive feelings for the outgroup, as did feeling that one's friend has learned about and understands one's own group. Regarding friendship variables and

intergroup attitudes, feeling that the friend understands and knows one, that friend is concerned for one and can be trusted, and closeness to friend all related to positive feelings about the friend's group.

#### Using Exploratory Factor Analysis to Examine Broad Patterns of Results

As in the retrospective study, a series of exploratory factor analyses were conducted in the longitudinal study to help identify overall patterns in the many correlations. Variables were broken into the following subsets for factor analysis: friendship variables, and variables relating to group memberships. Factor analyses for each of the previous subsets were then run separately for those in cross-race and same-race friendships; this was done so that patterns in variable relationships that were present in both groups of participants could be observed. Given the longitudinal nature of the current study, patterns across each time point were also compared. If variable groupings were similar between participant groups and at each time point, and also made conceptual sense, the mean for all variables making up the factor was calculated, thus creating a new factor for further analysis. On the basis of this series of factor analyses, which used promax factor rotation, five factors were identified for friendship processes at each time point, and three were identified among the group membership variables.

#### Factors

The friendship factors were "friend's interest in the participant" which combined the variables "friend knows me" and "I am important to friend" (about 39% of variance at each time point; .87 average alpha rating), "friendly attributes" which combined friend's "caring" nature, "valuing" one's perspective, how comfortable friend makes one, and trustworthiness of friend (about 16% of variance at each time point; .91 average alpha rating), the "affect" for friend factor combines enjoyment of time with friend, closeness to friend and liking of friend (about 14% of variance at each time point; .86 average alpha rating), the "identity similarity" variable combined perceived financial background and political views similarity (about 10% of variance at each time point; .74 average alpha rating), and the "personal similarity" variable combined perceptions of similar personality and values (about 6% of variance at each time point; .77 average alpha rating).

The group membership factors identified were "group impact" which was a combination of learning about the outgroup, contact with outgroup friend's family and friends, and the importance of friend's group membership to one's friend (about 37% of variance at each time point; .63 average alpha rating), the next factor was "mutual respect" which combined one's respect for friend's group with friend's respect for the participant's group (about 21% of variance at each time point; .92 average alpha rating), and the final factor was "outgroup appreciation" which is the average of one's belief that the friend has a "unique perspective" because of his or her group membership, and one's appreciation for this perspective (about 11% of variance at each time point; .69 average alpha rating).

Research Question Two: How do early cross-group relationships, as compared to same-race relationships, progress to friendships, and what factors play a role in maintaining these friendships? I first investigated whether any significant differences by friendship type (same-race versus cross-race) were present in the overall means of the new factors in the longitudinal study. The only significant t-test was for time 1 perception of personal similarity, of which there was a higher level reported by same-race friends ( $M = 5.06$ ,  $SD = 1.30$  as compared to  $M = 4.21$ ,  $SD = 1.32$ ;  $t [49] = 2.13$ ,  $p < .05$ ). Interestingly, this significant difference was not present in the later time points.

Next, I investigated potential interactions between friendship type (same-race versus cross-race) and the newly created factors predicted in predicting other new factors, suggesting a significant difference in the association of these factors by friendship type (See Table 30). I found that the interaction between friendship type (cross-race versus same race) and time one affect for friend predicted positive friend attributes at time one, while the product of friendship type and time 1 perceived identity similarity predicted time 1 perceived personal similarity. Friendship type also interacted with friend's interest in the participant at time 2 to predict time 2 positive friend attributes, and the product of friendship type and friend's interest at time 3 predicted perceived identity similarity at time 3.

Research Question Three: What role does group membership play at each level of the friendship process? When examining the relationships between group membership and friendship factors among cross-race friendship participants, several correlations emerged (See Table 31), including relationships between "group impact" and "friends interest" at times 1 and 3, "mutual respect" for groups at time 2 and personal similarity at time 2, mutual respect for groups at time 3 and affect and positive friend attributes at time three, and also appreciation for group at time 3 and affect and positive friend attributes at time 3. Finally, mutual respect for groups at time 2 was found to predict both time 3 positive friend attributes and personal similarity.

Research Question Four: What is the relation of early and later interpersonal processes, and of group membership factors, to intergroup attitudes? Many correlations between group membership factors and intergroup attitudes were observed at each time point among cross-race participants (See Table 32). In addition, many group membership variables were found to predict later intergroup attitudes (See Table 33). Time 2 group impact predicted time 3 feeling thermometer and was negatively associated to time 3 ingroup bias. Time 2 appreciation for outgroup of friend predicted time 3 outgroup admiration, feeling thermometer, and ingroup bias.

Finally, I investigated the relationship between changes in friendship factors over time (i.e. change scores) and intergroup attitudes. I found that increases in perceptions of positive friend attributes between times 2 and 3 was related to higher time 3 feeling thermometer ratings for the outgroup. Also, increase in perceptions of similarity to personal friend between times 2 and 3 predicted time 3 sympathy for the outgroup. Increases in perceptions of friend's interest in the participant between times 1 and 3



related to time 3 admiration for outgroup, as did increases in perceptions of identity similarity to friend between times 2 and 3. Increases in identity similarity over this time period also predicted time 3 sympathy for the outgroup.

## **V. General Discussion**

In two studies, a retrospective study with 143 cross-race friendship participants and 152 same-race friendship participants, and a 3-wave longitudinal study with 35 cross-race and 16 same-race participants, I systematically investigated, for the first time, the process by which cross-race versus same-race friendships were formed.

### Overview of Key Findings

Given the broad nature of the current research goals, I will first briefly summarize the overall pattern of results before describing more detailed findings.

Regarding how cross-race friends initially met (Research Question One), the key overall pattern was that initial interactions were less likely to happen via mutual friends, as compared to those in same-race friendships. Concerning friendship development and maintenance processes (Research Question Two), cross-race and same-race friends rarely differed in early concerns about forming a friendship or in perceived positive features of the then potential friend. However, in established friendships, same-race friendships had higher levels of self-disclosure. Interestingly, I found that associations between interpersonal variables were more numerous among those in cross race friendships, suggesting a greater variation in the intensity of these friendships. This could indicate that when intimacy is present in cross-group friendships, that the interpersonal factors involved are extremely intertwined.

Research questions three and four focused just on cross-race friendships, and in both cases, the overall pattern was one in which friendship variables were strongly linked to intergroup variables, suggesting that such friendships are not merely subtyped with the intergroup aspect irrelevant. Thus, the key pattern for Research Question Three was that factors involving affective bonds and friend's interest and concern for the participant were positively related to group membership factors such as interactions with OG friend's family, mutual respect for each person's racial group. And the key overall pattern of findings for Research Question Four was that positive attitudes for the friend's group were positively related to affective bond, positive friend attributes, and feeling that friend knows one and that one is important to the friend. Furthermore, friend's understanding and involvement with participant's group related to positive attitudes. These findings suggest that perceptions of friend's concern for participant and

participant's group encourage the participant to in turn have warmer feelings for the friend's group.

Overall, the current research found that intimate interpersonal processes have particular importance in the formation and maintenance of cross-group friendships. Furthermore, many of these processes, especially those concerning affect, and the concern and active involvement of the friend, were often associated with group membership factors and intergroup attitudes.

### Research Questions

In the following sections, I will review the original research question and will first describe the overall pattern of findings (across studies) relating to the question. I will also first discuss the findings that emerged from the factors created from the exploratory factor analyses to aid in clarifying the broad picture of the findings. After discussing the broad results, I then delve into deeper discussions of specific findings.

Research question one was: How do cross-group friendships begin? How does this compare to the formation of same-race friendships?

### Initial Friendly Contact: Overall Pattern of Findings

When comparing both the retrospective and longitudinal studies, the overall pattern of findings was that cross-race friends are less likely than their same-race counterparts to meet via mutual friends; this was found in both of the retrospective and longitudinal investigations. This suggests that cross-race friendships are more likely to develop outside of one's pre-existing social network. Furthermore, results from the longitudinal study underscore the importance of meeting cross-race friends in school and via university housing assignments. These findings parallel previous work revealing that the vast majority of friendly cross-race contact occurs inside school settings (e.g., Patchen, 1982).

### Initial Friendly Contact: Detailed Study Findings

Interestingly, no differences were reported between cross-race and same-race friendship participants regarding perceptions of how much choice they felt they had in first interacting. This suggests that although cross-race friendships may be more likely to develop in situations where contact is unavoidable, such as school or an employment setting, that interactions do not necessarily feel forced. In fact, results from the online (retrospective) study revealed that those in cross-race friendships often had the experience that their friend went out of their way to say "hello" to them. Furthermore, cross-race friendship participants themselves reported going out of their way to meet the individual due to that person's being unique more often than did those in same-race friendships. This suggests that there may be a motivation, for some, to seek out cross-race friendships, perhaps due to their own desire to be associated with someone of a differing group status.

This notion is in line with Aron and Aron's (1986, 1996) self-expansion model, which posits that people seek to enhance their potential efficacy through expanding the self; one way that people may do this is by including aspects of an other individual, sometimes being the person's identity (see also Aron, Norman & Aron, 1998). Especially relevant is recent work by Wright and McLaughlin-Volpe (2003). They manipulated participants "self-expansion motive" in an experimental setting and found that those motivated for self-expansion were more interested in working with an outgroup than an ingroup partner.

However, in the retrospective study, it was discovered that same-race friends, more often than cross-race friends, received invitations to do activities and visit the friend's home during the early stages of the relationship. The lesser degree of early activities could imply that cross-race friendships start out with more hesitations than do same-race friendships. The notion that individuals may be more slow in forming a cross-race friendship underscores earlier intergroup anxiety work which suggests that people may hold negative expectations for initial interactions with an outgroup member who isn't well-known (e.g., Stephan & Stephan, 1985).

Research question two was, how do early cross-group relationships, as compared to same-race relationships, progress to friendships, and what factors play a role in maintaining these friendships?

In both the retrospective and longitudinal studies, I approached this question by first examining mean differences in friendship factors (both early and late in the relationship) between the two types of friendships, and following with an investigation of how the relations among friendship factors and variables differ by friendship type. The notion that a variety of intimate processes (e.g., closeness, trust, self-disclosure) help to maintain friendships is well substantiated within the interpersonal literature (Fehr, 1996). This is the first study however, to my knowledge, looking at how friendship development and maintenance variables differ between those in a cross-race versus a same-race friendship.

### Friendship Formation: Overall Pattern of Findings

I first examined mean differences in friendship factors between friendship types (same-race versus cross-race). Regarding analyses involving early friendship factors, somewhat surprising was the finding that there were no differences in the factor perceived "positive friend characteristics" (i.e., outgoingness, warm, welcoming) of the then potential friend in the retrospective study. Along similar lines, there were no differences between cross-race and same-race friends on the early concerns about potential "identity differences" or "personality differences" factors, or on the "early bond development" factor in the retrospective study. Regarding factors in the longitudinal study, the only observed difference in means by friendship type (same-race versus cross-race) was in time 1 perception of "personal similarity" (i.e. personality and values

similarity) factor. This difference was no longer apparent at the later time points however.

These findings suggest that, somewhat surprisingly, there are few perceptions of dissimilarity among both those in same-race and cross-race friendships. They also suggest that initial levels of intimate processes and affect are relatively similar in both types of friendships.

This pattern of results was found to change at later stages of the friendship, however. In the retrospective study, the “current friendship bond” factor was significantly lower for those in cross-race friendships. This factor includes assessments of closeness, warmth and liking for one’s friend, as well as self-disclosure. Similarly, self-disclosure was significantly lower among those in cross-race friendships at time 1 and time 3 in the longitudinal study. These findings suggest that a greater amount of variation in levels of intimacy exist for those in cross-race friendships; perhaps this reflects a greater level of uncertainty and caution (e.g., Stephan & Stephan, 1985) among those in these friendships.

An interesting broad pattern of findings also emerged when using regression interaction analyses to examine potential differences in relationships of friendship factors between those in same-race versus cross-race friendships. Findings from both the retrospective and longitudinal studies revealed that factors concerning the positive involvement of one’s friend were related to affect for one’s friend more strongly among those in cross-race friendships. This is consistent with what was found among the single-item friendship variables; in both studies friend’s respectfulness, and concern for issues in one’s life related to other interpersonal factors to a greater degree for cross-race friends. The primary implications concerning intimate friendship processes from the results of both the retrospective and longitudinal studies are that, although intimate processes are an important feature in building and sustaining the relationships of both cross-race and same-race relationships, many of these variables are more often intercorrelated with each other, thus likely playing a major role in the maintenance of cross-race friendships.

In summary, it appears that among cross-race friendships, if intimate interpersonal processes are present in the relationship, they exist at high levels, and in great numbers, or not at all; in other words, more variance exists in these relationships with regard to interpersonal processes.

### Friendship Formation: Detailed Study Findings

A clear trend discovered in the current research was that cross-race friendships more often had significantly stronger relationships between friendship variables. For example, in the retrospective study, self-disclosure, inclusion of other in the self, and friend’s concern about one’s life, all had significantly greater relationships with other friendship factors among cross-race friends than same-race friends. Similarly, in the longitudinal study, Time 1 enjoyment of spending time with one’s friend, liking one’s friend, comfort with one’s friend, and trustworthiness of friend were all more strongly

associated with many other Time 1 friendship variables for those in cross-race rather than same-race developing friendships. Similar results were found at times two and three, and also across time points. These findings suggest that interpersonal processes vary more greatly with regard to their intensity in cross-race friendships than do those of same-race friends. They also underscore the importance of these processes, to the degree that they do in fact exist at high levels in these relationships, in maintaining the friendship bond.

The notion that intimate factors, to the extent that they are present in the relationship, play a large role in maintaining cross-race friendships is further supported by the finding that these friends report greater current concerns about relationship dissolution. Implications of previous research suggest that burgeoning cross-race friendships are likely have a greater level of fragility than same-race friendships. For example, during early encounters with less familiar individuals, minority group individuals sensitive to rejection based on their race are often especially vigilant to cues of prejudice (Mendoza-Denton et al., 2002). Perhaps, then, the intimate processes that do successfully develop between cross-race friends become particularly meaningful to these individuals, and thus important to maintaining the relationship itself. Consistent with this reasoning, in the longitudinal study, only among cross-race friendship participants did Time 2 frequency of one's personal disclosures significantly predict one's Time 3 belief that the friendship would be lasting.

One variable that emerged in both studies as playing a more meaningful role in the friendships of cross-race participants was intimate self-disclosure. Self-disclosure is well-established in the interpersonal literature as being a chief factor in the development of close relationships, with both the breadth and depth of disclosures having an impact (e.g., Altman & Taylor, 1973; Reis & Shaver, 1988). Results from the current research underscore the importance of self-disclosure in the formation of both same-race and cross-race friendships, although some differences between friendship groups were discovered. In the retrospective study, current amount of "personal information sharing" was related to one's feeling that the friend is important. In the longitudinal study, it is interesting to note that at Time 2 (mid-semester), depth of shared intimate information played a role in the friendship processes of same but not cross-race participants. However, at Time 3 (end of semester) depth was associated with perceptions of friend's dependability and concern for one's wellbeing for cross-race but not same-race participants. Furthermore, depth of self-disclosure at Time 2 becomes a significant predictor of Time 3 missing of one's friend among cross-race not same-race participants; meanwhile, as described above, frequency of Time 2 disclosures is a significant predictor of Time 3 belief in the friendship's future among only cross-race friends. This pattern of results suggests that reaching a point in the relationship where one feels comfortable disclosing personal information may take a longer time in cross-race friendships, but to the extent that this does happen, it is quite meaningful and thus may have a greater impact on other friendship processes for these individuals. This notion is further supported by the longitudinal findings that there is significantly less depth of self-disclosure among cross-race as compared to same-race friends at times one and three.

Several interesting results in the current research were related to perceptions of similarity. The finding that similarity has a role in the formation of both types of friendship fits with previous work in the interpersonal literature highlighting the importance of perceived similarity in early interactions (e.g., Woolsey & McBain, 1987). One interesting discrepancy between the results of the retrospective study and the longitudinal study is regarding the role of early perceived similarity. In study one, similarity appears to play a larger role among cross-race friendship participants in its relation to other friendship factors, whereas in study two, perceived similarity seems to play a larger role in the development of same-race rather than cross-race friendships. One explanation for this seemingly different pattern of findings is that they may be in part due to the retrospective nature of the first study; it may be that cross-race participants are more likely to recall that similarity played a role in the formation of their friendship than are same-race participants. Results from the third time point of the longitudinal study indicate that similarity (of values) seems to become a significant predictor of other intimacy factors later on in the friendship. This suggests that this apparent discrepancy may be due to a recency effect for this variable among cross-race friendship participants; it may be that over time, and as people get to know each other on deeper levels, similarity starts to become a more meaningful factor for those in cross-race friendships.

#### Group Membership: Overall Pattern of Findings

The third research question was: What role does group membership play at each level of the friendship process? The main goal on assessing this research question was to investigate potential relationships between factors relating to group memberships (participant's and friend's), and friendship development and maintenance factors. Regarding the broad pattern of findings among the group membership factors, friend's outgroup family members/friends and the overall "impact" of group membership on the relationship was related to perceptions of "friend's interest" in the participant, and to the affective friendship bond in both studies. Factors concerning friend's sensitivity to one's group, and the mutual respect for groups among friends were related to affection, perceptions of similarities, and positive perception of friend's attributes or characteristics. This pattern was similar to the findings in the single-factor analyses of both studies; one's interactions with outgroup friends and family members related to self-disclosure and affect between cross-race friends. Overall, these findings suggest that additional positive exposures to outgroup members, and the positive highlighting of the cross-group nature of the relationship is related to positive intimate processes in these friendships.

#### Group Membership: Detailed Study Findings

One main theme that emerged relating to group membership was the role of intergroup anxiety in the friendships of those having different racial backgrounds. Despite the many positive relationships between the friendship processes of cross-group friendships discovered in the current study, intergroup anxiety still emerged frequently as

a factor in these relationships. Intergroup anxiety was related to early concerns about differences between cross-group friends in the retrospective study, and was negatively related to several friendship processes, such as closeness and self-disclosure, at multiple time points in the longitudinal study. These findings underscore previous research in the field of intergroup relations describing the potentially negative impact of this variable on cross-group interactions (e.g., Britt et al., 1996; Stephan & Stephan, 2001). However, an especially interesting finding in the retrospective study was that although intergroup anxiety had associations to early friendship concerns and factors, it had no significant relationship to the current friendship processes that underlie these successful cross-group relationships. This implies that once a friendship between cross-group individuals has made it past initial difficulties, the interracial nature of the relationship is no longer a cause for discomfort for someone who may otherwise find such a situation to be distressing. In a similar work, a longitudinal study by Levin, van Laar and Sidanius (2003) found that those making a cross-race friendship early in their college careers reported less intergroup anxiety at the end of their final year at school. In addition, my current finding fits with the recent work of Page-Gould and colleagues (2007), who found that the intergroup anxiety among university students sensitive to rejection on the basis of their race could be quelled after undergoing several sessions of closeness generating techniques.

The current research also identified several associations between group membership and intimate friendship processes that were, to my knowledge, previously undiscovered. In the retrospective study, interesting findings relating to additional early cautions among those in cross-group friendships were uncovered. The perception that either friend's or one's own group had ever been the target of prejudice was associated with several friendship variables. For example, belief that one's own group has a history of being the target of prejudice was related to lower levels of believing that one's cross-group friend currently understands the viewpoint of their race. This is an interesting finding because it suggests that concerns about being misunderstood by one's outgroup friend can persist even after the establishment of the friendship. This result is especially noteworthy in light of the findings that intergroup anxiety is not related to current friendship processes in the established friendships of the retrospective study participants. This suggests that although initial negative emotions can diminish over time as the friendship progresses, hesitations that are more cognitive in nature (e.g. beliefs about how one's group is viewed by the friend) may remain.

However, in addition to the potentially negative role of some group membership factors, there were also several group membership variables that demonstrated a positive association with cross-group friendship development and maintenance. A major theme in the current research was the positive impact of spending time with the outgroup friend's family members and friends of their ethnicity (i.e., the outgroup). In the retrospective study, time spent with outgroup friends and family was found to be related to early self-disclosure and trust, and current inclusion of other in self. In the longitudinal study, interactions with friend's outgroup family and friends was related to one's feeling that they know the friend well, as well as their level of self-disclosure to friend. This finding

highlights the ability of close cross-group relationships to expose individuals to further experiences of meaningful, intimate cross-group contact. These positive experiences are not only likely to improve one's views of the group, but, according to the current findings, improve one's view of the outgroup friend as well. Furthermore, in study one, ethnic identity among cross-race participants, although found to be associated with longer length of time taken to share personal information initially, was also found to relate to one's current perception that the friend respects one's viewpoints, to current explanations about group's views about issues, and is also positively related to current perceived support for the cross-race relationship by both one's own and friends social circles. This lends further support that although cross-race friendships may start out with more initial hesitations than do same-race friendships, as comfort and trust develops, and individuals are able to be open about issues relating to their backgrounds, cross-group factors can begin to have a positive role in the friendship. Taken as a whole, these findings suggest that in spite of the concerns cross-race friends may have about potential relationship dissolution, there still may be several avenues, relating to group memberships, by which cross-group friendships can grow stronger.

The fourth research question was: What is the relation of early and later interpersonal processes, and of group membership factors, to intergroup attitudes? An important contribution of the current research is the incredibly wide variety and depth of friendship and variables assessed in association with intergroup attitudes. This is the first study, to my knowledge, that looks at such a large number of interpersonal factors in conjunction with intergroup variables.

#### Intergroup Attitudes: Overall Pattern of Findings

Several broad patterns of findings emerged when investigating the relationship between group membership factors and intergroup attitudes. First, group membership factors relating to outgroup family/friends and "group impact" on relationship were associated with positive intergroup attitudes in both the retrospective and longitudinal studies. This pattern was also found in the single-item variable analyses in both studies; interacting with the outgroup friends family and friends was related to positive feelings for the outgroup, as was feeling that one's friend had learned about and understands one's own group. In summary, these results highlight the importance of positive activities and beliefs regarding group memberships in improving intergroup attitudes. In addition, they underscore Hewstone and Brown's (1986) Mutual Differentiation model of cross-group contact, which argues for the emphasis of relevant group identities in making a positive change in intergroup attitudes.

Further broad patterns in findings emerged when reviewing results concerning relationships between intergroup attitudes and the friendship factors. Main findings from both studies were that the current affective bond factor, friend's interest in the participant and positive attributes all related to positive intergroup attitudes: subtle prejudice and feeling thermometer ratings. These patterns were also present in the single-item analyses;



across both studies, one's feeling that the friend understands and knows one, that friend is concerned for one and can be trusted, and closeness to friend all related to positive feelings about the friend's group. These variables are likely to be of particular importance to cross-race friendships, given what is known about the delicate nature of these relationships; factors such as those listed above indicate a high degree of devotion and intimacy on the part of the friend, and so it makes sense that they would have an especially meaningful impact on attitudes. Overall, the findings of this research question, which concern the relationship of intimate and intergroup factors among those in cross-race friendships, highlight the importance of close interpersonal processes in the development of positive views about other social groups (e.g., Miller, 2002; Pettigrew, 1997).

In summary, the broad pattern of findings were; regarding group membership, that importance of positive cross-group activities had a positive impact on intergroup attitudes, as did beliefs that the friend is genuinely concerned for one and committed to the friendship.

#### Intergroup Attitudes: Detailed Study Findings

An important trend in the analyses concerning intergroup attitudes was the observation of greater associations of friendship and group membership variables to specifically affective assessments of prejudice; for example, there were greater numbers of, and stronger associations of friendship variables to empathy as compared to the association of friendship variables with perceived similarity between groups and belief in stereotype truth. This pattern fits with the findings of Pettigrew and Tropp's (2000; 2006) meta-analysis of intergroup contact and intergroup attitudes, as well as my own meta-analysis (Davies, Tropp, Aron, Pettigrew & Wright, 2009), looking specifically at friendship contact, indicating that stronger effect sizes exist between contact and affective rather than cognitive assessments of prejudice.

The current findings investigating interpersonal processes within cross-race friendship participants also confirmed many associations between intimacy variables and intergroup attitudes receiving recent attention in the intergroup literature. For example, feeling thermometer ratings were related to depth and frequency of self-disclosure to one's cross-group friend multiple time points. This underscores the findings of Turner and colleagues' (2007) study on the relationship of self-disclosure and prejudice, indicating that self-disclosure to one's outgroup friend served as a mediator of the relationship between intergroup contact and prejudice.

A final key finding in the current research regarding intergroup attitudes was the indication that there may be a reciprocal nature to some of the intergroup attitudes that develop between cross-group friends. For example, in the retrospective study, it was discovered that level of one's belief that the friend understands and respects one's group was related to one's own sympathy and admiration (i.e., subtle prejudice) and empathy for the outgroup of one's friend. Along similar lines, in the longitudinal study, outgroup admiration was related both to one's learning new things about the group because of the

friend, as well as the belief that the outgroup friend also learned new things about the participant's group. This finding makes sense regarding the trepidation often surrounding early cross-group encounters as described in the intergroup literature. In addition, the findings from the current research indicate that, among cross-group friendships, there existed current concerns that one's friend will not understand the views of one's group, and that the relationship itself may not last. Given these hesitations, perhaps the discovery that the friend is concerned for both one's self and for one's group is particularly meaningful, and one is thus encouraged to reciprocate the outgroup concern.

#### Summary of Broad Findings across Studies & for All Research Questions

To summarize, similar patterns in the findings of the retrospective and longitudinal studies were discovered that contribute to an overall picture of the current research. Regarding how cross-group friends meet, initial interactions are much less likely to occur in existing social networks, as they often do for same-race friendships. There are few discrepancies between same-race and cross-race friendships regarding initial concerns about differences or positive perceptions of the potential friend, but as the relationship develops it appears that close intimate processes more often occur at higher levels among same-race friends. The interpersonal processes that do occur in cross-group friendships, however, tend to be more often significantly and strongly intercorrelated with other intimate processes; this suggests that these intimate processes have particular meaning in these developing friendships given their often fragile nature. Furthermore, these interpersonal processes, such as friend's interest and concern, and affective bonds between friends are often related to both group membership factors and intergroup attitudes. Finally, friend's understanding and involvement with participant's group seems to encourage the participant to in turn have more positive attitudes for the friend's group (i.e. the outgroup).

## VI. Conclusions

In summary, cross-race friends were found to have first met via mutual friends less often than same-race friends. Additionally, intimate interpersonal processes were found to play important roles in the formation and maintenance of cross-group friendships. Many friendship factors, particularly those concerning affect, and the concern and active involvement of the friend, were often associated with group membership factors and intergroup attitudes. Taken as a whole, these findings underscore the notion that intimate interpersonal processes are likely to often play a key role not only in the building and maintaining of these relationships, but in influencing intergroup processes as well.

The cumulative findings of the present research have several important implications. First, regarding the circumstances surrounding the formation of cross-race friendships, the current research found that these relationships are much more likely to develop in an organizational context such as a school or workplace, as opposed to within one's existing social network. This suggests that despite all of the changes that have taken place in the U.S. with regard to race relations since desegregation and the passing of other equal rights legislation, that people still have the tendency to create social networks that are homogeneous with regard to one's racial background. Furthermore, this finding suggests the importance of the quality of the cross-race contact fostered in the environments where cross-race interactions occur by chance (e.g., schools, universities, places of employment). Another interesting finding that emerged from the first research question was that many participants in cross-race friendship reported specifically being attracted to their friend due to the "unique" qualities of the friend. This could mean that people in cross-group friendships are likely to be specifically attracted to the cross-group nature of the relationship. Conversely, this finding could also mean that the "unique" qualities of the individual override any perceived racial differences.

With regard to the examination of differences in the associations of interpersonal variables between friendship types, the overarching theme was that many intimate factors, although important to both types of friendships, seem to have more frequent interrelations in cross-group relationships. This finding is especially interesting in light of the finding that those in cross-race friendships more often report current concerns about potential relationship dissolution. Given what is known about the often fragile nature of early cross-group interactions; the implication is that when intimate processes that do successfully develop between cross-race friends, that these factors are of particular importance to relationship maintenance. This notion is supported by the finding that although cross-race friends, on average, take a longer time to disclose personal information, once they do so, self-disclosure starts to become more frequently related to other intimacy processes, and more strongly related to other intimacy processes, as compared to same-race friendships.

The current research is particularly unique in that it assessed a multitude of friendship processes, group membership factors, and intergroup attitudes simultaneously and, in the longitudinal study, across multiple time points. Some of the major results, focusing on just the cross-race friendship participants, include the retrospective study finding that anxiety, while having a negative association to many factors at earlier points recalled in the friendship, did not have an association to current friendship factors. Additionally, it was found that one's belief that their group has a history of being the target of prejudice was related to lower levels of believing that one's friend currently understands the viewpoint of their race. These findings suggest that although intimate processes may do much to quash initial emotional distress, perhaps concerns having more of a cognitive basis (e.g. beliefs or knowledge about how the friend's group views one's group in larger society) persist.

However, some of the most interesting findings in the current research are concerned with very positive relationships between intimate processes, group

memberships and intergroup attitudes. For instance, variables assessing the degree to which one's outgroup friend can be depended upon, that the friend is concerned for one's wellbeing, that he or she makes the participant feel comfortable and at ease, and that the friend values one's perspective, all had many associations with both positive group membership factors as well as intergroup attitudes among cross-race friends. One's endorsement of these friendship variables would indicate an extremely high level of intimacy, so it is perhaps not surprising that they often had such strong associations to other friendship processes.

Finally, the current research points to the importance of reciprocal processes in the development and maintenance of cross-group friendships. Many intergroup attitude variables (i.e., about the outgroup) were found to be associated to one's perception that the outgroup friend is interested in and concerned about his or her own group. This suggests that cross-group friends may be more likely to be attuned to issues of fairness and balance in the relationship.

### Potential Limitations

First, all of the data in the current research are derived from surveys. Given the sensitivity of the topic, some participants could have felt pressured to give socially desirable answers. This is especially the case for cross-race participants in the retrospective study, where the attitude items simply inquired about "the group of your friend," hence reminding participants of the association of their friend to that particular group. The phrase "of your friend" was kept to an absolute minimum, however, with most questions simply inquiring about "this group." Furthermore, participants were asked to please "be honest" and reminded that "everybody's opinion is valid; there are no 'correct' answers." In addition, the inclusion of the social desirability items made it possible to partial out the role of this variable whenever necessary for data analysis.

Another potential issue is the low number of participants in the same-race friendship condition of the longitudinal study ( $n = 16$ ). Unfortunately, this was beyond the author's control, as the mass testing sessions that were utilized over the past two semesters yielded significantly fewer participants than it had in previous years, and that were thus anticipated. The fact that many significant associations were found among this group despite this, and also that a similar pattern of findings (i.e. greater associations among cross-race friendships) was observed in the retrospective study data gives me confidence in the data, however.

In addition, it is important that I note the potential role of gender in the findings of the current research. While there has more recently been some discussion about the degree to which gender influences friendship relationships (e.g. Fehr, 2004), there has been much work in support of the notion that the friendships of females tend to be more intimate (e.g., Reis, 1988). First, chi-square analyses were run in both studies assessing the frequency of female participants and both were non-significant; the similar distribution of women for both types of friendship (average of about 75%) in each study gave me confidence that gender effects would likely be equally distributed. To check this

presumption in each study, I ran several ANOVAs involving the larger friendship factors created from the exploratory factor analyses, checking for interactions between gender and friendship type (same-race versus cross-race). These analyses revealed almost no interaction effects between friendship type and gender. Furthermore, the few interactions discovered had little impact on the larger relationships between the friendship factors, group membership factors, and intergroup attitudes. However, several significant main effects for gender were discovered, suggesting that this factor does play a role in the interpersonal processes of both friendship types in the current study. Because of this, and the large numbers of females in the current research, readers should be aware that the patterns of findings reported in the current study are mainly based on the interpersonal processes of female participants. One should therefore use caution in applying the current findings to the cross-group interpersonal processes to males.

A final concern is that nearly all of the variables in the current study were assessed using a single item. This was something that was difficult to avoid for two reasons; first, the surveys needed to be kept to a very short length of time, and so the use of large, multiple item scale was impossible. Second, given the exploratory nature of the current research, I was interested in first seeing how these newly developed items stood on their own, without yet being combined with other factors. After investigating relationships between the single-item variables, however, I did conduct an exploratory factor analysis. From this analysis, larger factors did emerge that helped to clarify overall patterns in study findings.

### Future Directions

The current research could be extended in several ways. First, it would be interesting to look at differences between cross-race potential friends who do and do not ultimately become friends at the final point of the study. This may be an excellent way to further identify the challenges that often impact these friendships. Second, findings of the current research suggest that there may be a reciprocal nature to the development of intergroup attitudes among cross-race friends. Obtaining a play-by-play account of the interactions of cross-race friends may lead to new insights about the processes that underlie these relationships. Finally, future research could use the current work as a basis upon which to build a larger, more defined theoretical model of the interactions between these factors. The current study has identified many new variables that clearly impact cross-race friendship processes; the next logical step would be to gain a clearer view of how they relate to each other. For example, a large study assessing the main factors of the current research over several time points; perhaps among college freshman with assessments made every week during their first year at school. Another approach would be to conduct an observational study investigating the interactions that take place between personas in developing friendships. A final idea is that, in an experimental investigation, one could systematically manipulate the interpersonal processes having significant weight in the current research, and observe which have the greatest impact on intimacy.

## References

- Allport, G.W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart & Winston.
- Archer, R. L., & Berg, J. H. (1987). Disclosure reciprocity and its limits: a reactance analysis. *Journal of Experimental Social Psychology, 14*, 527-540.
- Aron, A., & Aron, E. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. New York: Hemisphere.
- Aron, A., & Aron, E. (1996). Love and expansion of the self: The state of the model. *Personal Relationships, 3*, 45-58.
- Aron, A., Aron, E., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*, 596-612.
- Aron, A., & McLaughlin-Volpe, T. (2001). Including others in the self: Extensions to own and partner's group memberships. In C. Sedikides & M.B. Brewer (Eds.), *Individual self, relational self, collective self* (pp. 89-108). Philadelphia: Psychology Press.
- Aron, A., Melinat, E., Aron, E. N., Vallone, R. D., & Bator, R. J. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin, 23*, 363-377.
- Aron, A., Norman, C. C., & Aron, E. N. (1998). The self-expansion model and motivation. *Representative Research in Social Psychology, 22*, 1-13.
- Backman, C. W., & Secord, P. F. (1959). The effect of perceived liking on interpersonal attraction. *Human Relations, 12*, 379-383.
- Barth, R. J., & Kinder, B. N. (1988). A theoretical analysis of sex differences in same-sex friendships. *Sex Roles, 19*, 349-363.
- Berg, J. H. (1984). The development of friendship between roommates. *Journal of Personality and Social Psychology, 46*, 346-356.
- Berndt, T., & Perry, T. B. (1986). Children's perceptions of friendships as supportive relationships. *Developmental psychology, 22*, 640-648.
- Britt, T. W., Boniecki, K.A., Vescio, T.K., Biernat, M., & Brown, R. (1996). *Personality and Social Psychology Bulletin, 22*, 1177-1188.
- Brown, R., Eller, A., & Leeds, S. (2007). Intergroup contact and intergroup attitudes: A longitudinal study. *European Journal of Social Psychology, 37*, 692-703.
- Byrne, D. (1971). The ubiquitous relationship: Attitude similarity and attraction: A cross-cultural study. *Human Relations, 24*, 201-207.
- Byrne, D., & Clore, G. L. (1970). A reinforcement-affect model of evaluative responses. *Personality: An International Journal, 1*, 103-128.
- Cook, M. (1977). The social skill model and interpersonal attraction. In S. Duck (Ed.), *Theory and practice in interpersonal attraction* (pp. 319-338). London: Academic Press.

- Crawford, M. (1977). What is a friend? *New Society*, 20, 116-117.
- Davies, K. M., Aron, A., Wright, S., & McLaughlin-Volpe, T. (2007). *The Stony Brook Intergroup Fast Friends Project: Some Initial Results*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Memphis, TN.
- Davies, Tropp, Aron, Pettigrew & Wright, (2009). Cross-group friendships and intergroup attitudes: A meta-analytic review. Manuscript in Preparation.
- Davis, D., & Perrowitz, W. T. (1979). Consequences of responsiveness in dyadic interaction: effects of probability of response and proportion of content-related responses on interpersonal attraction. *Journal of Personality and Personality and Social Psychology*, 37, 34-50.
- Devine, P. G., Evett, S. R., & Vasquez-Suson, K. A. (1996). Exploring the interpersonal dynamics of intergroup contact. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition: Vol 3. The interpersonal context* (pp. 423-464). New York: Guilford Press.
- Duck, S. W. (1983). *Friends, for life*. New York, NY: St. Martin's Press.
- Duck, S. W., Rutt, D. J., Hurst, M., & Strejc, H. (1991). Some evident truths about conversations in everyday relationships: All communication is not created equal. *Human Communication Research*, 18, 228-267.
- Fehr, B. (1996). *Friendship processes*. Thousand Oaks, CA: Sage.
- Fehr, B. (2004). A prototype model of intimacy interactions in same-sex friendships. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 9-26). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fehr, B., & Russell, J. A. (1991). The concept of love viewed from a prototype perspective. *Journal of Personality and Social Psychology*, 60, 425-438.
- Gore, J. S., Cross, S. E., & Morris, M. L. (2006). Let's be friends: Relational self-construal and the development of intimacy. *Personal Relationships*, 13, 83-102.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A Very Brief Measure of the Big Five Personality Domains. *Journal of Research in Personality*, 37, 504-528.
- Gottman, J. M. (1983). How children become friends. *Monographs of the Society for Research in Child Development*, 48, 1-86.
- Hatfield, E., & Traupmann, J. (1981). Intimate relationships: A perspective from equity theory. In S. W. Duck & R. Gilmour (Eds.), *Personal relationships: Vol. 1. Studying a personal relationships* (pp. 165-178). London: Academic Press.
- Hays, R. B. (1984). The development and maintenance of friendship. *Journal of Social and Personal Relationships*, 1, 75-98.
- Hays, R. B. (1985). A longitudinal study of friendship development. *Journal of Personality and Social Psychology*, 48, 909-924.
- Heider, F. (1958) *The Psychology of Interpersonal Relations*, New York: Wiley.
- Herek, G.M., & Capitanio, J.P. (1996). "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin*, 22, 412-424.

- 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). New York: Basil Blackwell.
- Hindy, C. G. (1980). Children's friendship concepts and the perceived cohesiveness of same sex friendship dyads. *Psychological Reports*, *47*, 191-203.
- Jones, W. H., & Carpenter, B. N. (1986). Shyness, social behavior, and relationships. In W. H. Jones, J. M. Cheek, & S. R. Briggs (Eds.), *Shyness: Perspectives on research and treatment* (pp. 227-238). New York: Plenum.
- Jormakka, L. (1976). The behaviour of children during a first encounter. *Scandinavian Journal of Psychology*, *17*, 15-22.
- Klinger, E. (1977). *Meaning and void: Inner experience and the incentives in people's lives*. Minneapolis, MN: U Minnesota Press.
- Knapp, M. L., Ellis, D. G., & Williams, B. A. (1980). Perceptions of communication behavior associated with relationships terms. *Communication Monographs*, *47*, 262-78.
- Lederberg, A. R., Rosenblatt, V., Vandell, D. L., & Chapin, S. L. (1987). Temporary and long-term friendships in hearing and deaf preschoolers. *Merrill-Palmer Quarterly*, *33*, 515-533.
- Levin, S., van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendship on ethnic attitudes in college: A longitudinal study. *Group Processes and Intergroup Relations*, *6*, 76-92.
- Levinger, G., & Snoek, J. D. (1972). *Attraction in relationships: A new look at interpersonal attraction*. Morristown, NJ: General Learning Press.
- Lewis, M., Young, C., Brooks, I., & Michelson, L. The beginning of friendship. In M. Lewis & L.A. Rosenblum (Eds.), *Friendship and peer relations*. New York, New York: Wiley, 1975.
- McLaughlin-Volpe, Aron, A., Wright, S. C., & Reis, H. T. (2000). *Intergroup social interactions and intergroup prejudice: Quantity versus quality*. Manuscript submitted for publication.
- Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Personality and Social Psychology*, *83*, 896-918.
- Miller, N. (2002). Personalization and the promise of contact theory. *Journal of Social Issues*, *58*, 387-410.
- Newcomb, T. M. (1961). *The acquaintance process*. New York: Holt, Rinehart & Winston.
- Newcomb, A. F., & Brady, J. E. (1982). Mutuality in boys' friendship relations. *Child Development*, *53*, 392-395.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2007). *From intergroup*



- contact to intergroup closeness: Stress-reducing effects of emerging cross-race friendship.* Manuscript submitted for publication.
- Patchen, M. (1982), *Black-white contact in the schools: Its social and academic effects.* West Lafayette, IN: Purdue University Press.
- Patzer, G. L. (1985). *The physical attractiveness phenomena.* New York: Plenum.
- Pettigrew, T. F. (1997a). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173-185.
- Pettigrew, T. F. (1997b). The affective component of prejudice: Empirical support of the new view. In S. A. Tuch & J. K. Martin (Eds.), *Racial attitudes in the 1990s: Continuity and change* (pp. 76-90). Westport: Praeger.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85.
- Pettigrew, T. F., & Meertens, R. W. (1995). Subtle and blatant prejudice in western Europe. *European Journal of Social Psychology*, 25, 57-75.
- Pettigrew, T. F., & Tropp, L. R. (2000). Does intergroup contact reduce prejudice? Recent meta-analytic findings. In S. Oskamp (Ed.), *Reducing prejudice and discrimination: Social psychological perspectives* (pp. 93–114). Mahwah, NJ: Erlbaum.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783.
- Pettigrew, T. F., & Tropp, L. R. (under review). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*.
- Phinney, J. (1992) The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research*, 7, 156-176.
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 790-801.
- Plant, E. A., & Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin*, 29, 790-801.
- Reis, H. T. (1988). Gender effects in social participation: Intimacy, loneliness, and the conduct of social interaction. In R. Gilmour & S. Duck (Eds.), *The emerging field of personal relationships* (pp. 91-105). Hillsdale, NJ: Erlbaum.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck (Ed.), *Handbook of personal relationships* (pp. 367-389). New York: Wiley.
- Roberto, K., & Kimboko, P. (1989). Friendships in later life: Definitions and maintenance patterns. *International Journal of Aging and Human Development*, 28, 9-19.

- Rodin, M. (1982). Non-management, failure to engage, and disengagement. In S. Duck (Ed.), *Personal relationships: Vol 4. Dissolving personal relationships* (pp. 31-49). London: Academic.
- Rotenberg, K. J. (1986). Same-sex patterns and sex differences in the trust-value basis of children's friendship. *Sex Roles, 15*, 613-626.
- Rubin, L. (1985). *Just friends*. New York: Harper & Row.
- Rusbult, C. E. (1980). Satisfaction and commitment in friendships. *Representative Research in Social Psychology, 11*, 96-105.
- Sapadin, L. A. (1988). Friendship and gender: Perspectives of professional men and women. *Journal of Social and Personal Relationships, 5*, 387-403.
- Shelton, J. N. (2003). Interpersonal concerns in social encounters between majority and minority group members. *Group Processes and Intergroup Relations, 6*, 171-185.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues, 41*, 157-175.
- Stephan, W. G., & Stephan, C. W. (2001). *Improving intergroup relations*. Thousand Oaks, CA: Sage.
- Tesch, S. A., Martin, R. R. (1983). Friendship concepts of young adults in two age groups. *Journal of Psychology: Interdisciplinary and Applied, 115*, 7-12.
- Thibaut, J. J., & Kelley, H. H. (1959) *The Social Psychology of Groups*, New York: Wiley.
- Tropp, L.R. (2003). The psychological impact of prejudice: Implications for intergroup contact. *Group Processes and Intergroup Relations, 6*, 131-149.
- Tropp, L.R., & Pettigrew, T.F. (2005). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science, 16*, 951-957.
- Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology, 93*, 369-388.
- Williams, R.M., Jr. (1947). *The reduction of intergroup tensions*. New York: Social Science Research Council.
- Woolsey, L. K., & McBain, L. L. (1987). Women's networks: Strengthening the bonds of friendship between women. In K. Storrie (Ed.), *Women: Isolation and bonding* (pp. 59-76). Toronto, Ontario: Methuen.
- 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*, 73-90.
- Wright, S.C., Aron, A., Tropp, L.R. (2002). Including others (and groups) in the self: Self-expansion and intergroup relations. In J.P. Forgas & K.D. Williams (Eds.),

*The social self: Cognitive, interpersonal, and intergroup perspectives* (pp. 343-363). New York: Psychology Press.

Wright, S. C., & McLaughlin-Volpe, T. (2003). Priming self-expansion and interest in cross-group contact. Unpublished manuscript, University of California, Santa Cruz.

Wright, S. C., & Van Der Zande, C. C. (1999). *Bicultural friends: When cross-group friendships cause improved intergroup attitudes*. Paper presented at the Society for Experimental Social Psychology, St. Louis, MO, USA.

**TABLE 1** - T-test Results among Retrospective Study Participants:  
Effect of Friendship Type on Early Friendship Variables

Variable	Same-Race		Cross-Race		t- test result
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Years Known	14.40	12.05	6.01	5.30	$t(287) = 7.56^{**}$
Meeting via Mutual Friends	3.75	2.31	3.15	2.10	$t(287) = 2.28^*$
Early Trust	5.75	1.32	5.52	1.37	$t(287) = 1.94^*$
Age at First Meeting	19.39	9.66	23.25	10.54	$t(287) = 3.28^{**}$
Concern: Traveling	1.39	1.01	1.82	1.48	$t(287) = 21.49^*$
Concern: Ethnic Differences	1.37	0.92	1.90	1.43	$t(287) = 3.86^{**}$

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 2** - Chi-square Tests: Differences in Friendship Type  
(Cross-Race versus Same-Race) on Current Friendship Variables

Variable	Same-Race	Cross-Race	Chi-square
	% of $n = 152$	% of $n = 143$	
Sharing Personal Details	82%	66%	$\chi^2(1, N = 295) = 9.59^{**}$
Having Shared "History"	72%	46%	$\chi^2(1, N = 295) = 22.12^{**}$
"Meaningful Experiences"	65%	50%	$\chi^2(1, N = 295) = 6.02^{**}$
Friend "Kinder than Most"	60%	48%	$\chi^2(1, N = 295) = 4.35^*$
"I May Move"	28%	39%	$\chi^2(1, N = 295) = 3.90^*$
"My Friend May Move"	23%	38%	$\chi^2(1, N = 295) = 7.60^{**}$
"I'll Be Busy with Work"	24%	36%	$\chi^2(1, N = 295) = 5.10^*$
Friend "Busy with Work"	17%	30%	$\chi^2(1, N = 295) = 6.91^{**}$
Friendship "Too Strong to End"	46%	34%	$\chi^2(1, N = 295) = 4.25^*$

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 3** - T-tests: Differences between Friendship Types  
(Cross-Race versus Same-Race) on Current Friendship Variables

Variable	Same-Race		Cross-Race		t- test result
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Warmth for Friend	6.00	1.30	5.60	1.60	$t(294) = 2.50^{**}$
Closeness Felt	6.20	1.20	5.70	1.40	$t(294) = 3.00^{**}$
Inclusion of Other in Self	4.60	1.60	4.20	1.40	$t(294) = 2.30^*$
Friendship will Continue	6.60	0.89	6.20	1.20	$t(294) = 3.10^{**}$

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 4 - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Early Friendship Variables on Other Friendship Variables**

Variable One	Variable Two	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Early Similarity	Early Helping	n.s.	.20*	.15*
Early Similarity	Early Trust	n.s.	.24**	.12*
Early Similarity	Frnd. Doesn't Judge (Early)	n.s.	.21*	.12*
Early Similarity	Frnd. Respects Views (Early)	n.s.	.24**	.11*
Early Similarity	Current Friendship Importance	n.s.	.33**	.16**
Early Similarity	Prsnal Info Sharing (Current)	n.s.	.29**	.15**
Early Similarity	Current IOS	n.s.	.23**	.11*
Early Welcoming	Time Until "Friends"	-.37**	n.s.	.11*
Early Welcoming	Early Helping	n.s.	.32**	.13*
Early Welcoming	Early Self Disclosure	n.s.	.27**	.16*
Early Welcoming	Early Honesty	n.s.	.42**	.17**
Early Welcoming	Friend Cares (Current)	n.s.	.35**	.15*
Early Welcoming	Current Trust	n.s.	.26**	.15*
Early Welcoming	Current IOS	n.s.	.17*	.11*
Early Friend Uniqueness	Current Friendship Importance	n.s.	.19*	.12*
Early Friend Uniqueness	Friend Cares (Current)	n.s.	.29**	.15*
Early Friend Uniqueness	Current Trust	n.s.	.19*	.13*
Mutual Friends	Early Nervousness	n.s.	.23**	.17**
Time Until "Friends"	Early Helping	.18*	n.s.	-.13*
Early Concerns: Ethnic	Early Concerns: Lifestyles	.38**	.51***	.11*
Early Concerns: One's Circle	Early Concerns: Ethnic	.29*	.41***	.11*
Early Concerns: One's Circle	Early Concerns: Political	.27**	.47***	.12*
Early Concerns: One's Circle	Early Concerns: Travel	n.s.	.30**	.16*
Early Concerns: Frnd's Circle	Early Concerns: Ethnic	.29**	.41***	.18*
Early Nervousness	Early Concerns: Interests	.18*	.37**	-.16*
Early Nervousness	Early Concerns: Political	n.s.	.22**	-.16*
Early Trust	Early "Being Self"	.56**	.38***	-.20**
Early Trust	Current Time Together	n.s.	.44***	.13*
No Judgment (Early)	Early Welcoming	.20*	.43**	.12*
No Judgment (Early)	Friend's Qualities (Early)	.36**	.48**	.12*
No Judgment (Early)	Prsnal Info Sharing (Current)	.31*	.41***	.14*
No Judgment (Early)	Current Closeness	.21*	.36***	.13*
No Judgment (Early)	Importance to Frnd. (Current)	.26**	.34**	.11*
No Judgment (Early)	Friend Cares (Current)	.25**	.41***	.13*
No Judgment (Early)	Asks about One's Life (current)	.19*	.38***	.16*
No Judgment (Early)	Friendship's Future (Current)	n.s.	.39***	.13*
Frnd. Respects Views (Early)	Current Closeness	.73***	.37**	.13*
Frnd. Respects Views (Early)	Friend Cares (Current)	.25**	.41***	.15*
Frnd. Respects Views (Early)	Friendship's Future (Current)	n.s.	.32**	.16*
*p < .05, **p < .01, ***p < .001				

**TABLE 5** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Current Friendship Variables on Other Friendship Variables

Variable One	Variable Two	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Friend is Unique	Importance of Friend	.42**	.57***	.17**
Friend is Unique	One is Important to Friend	.30**	.42***	.12*
Friend is Unique	Closeness	.28*	.53***	.17**
Friend is Unique	Friend Cares	.30**	.50***	.16**
Friend is Unique	Friend Asks about One's Life	n.s.	.34**	.12*
Friend is Unique	Belief in Friendship's Future	.20*	.48***	.20**
One's Personal Information Sharing	One is Important to Friend	.69***	.82***	.17**
Closeness	Importance of Friend	.73***	.82***	.16**
Inclusion of Other in Self	Warmth for Friend	.39**	.49***	.12*
Inclusion of Other in Self	One is Important to Friend	.42**	.57**	.17**
Friend Asks about One's Life	One Cares About Friend	.34**	.53***	.15*
Friend Asks about One's Life	Closeness	.37**	.59***	.15*
Friend Asks about One's Life	One is Important to Friend	.35**	.56***	.12*
Friend Asks about One's Life	Belief in Friendship's Future	.23**	.54***	.13*

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$



**TABLE 6 - Correlations between Friendship Variables and Group Membership Variables among Cross-Race Participants (Partialing Out Social Desirability)**

Friendship or Group Membership Variable	Group Membership Variable	<i>r</i>	Partial <i>r</i>
Choice in First Interaction	Intergroup Anxiety	-.17*	n.s.
Backgrounds Too Different (Early)	Intergroup Anxiety	.20**	-.19*
Friendship via Early Honesty	Intergroup Anxiety	-.19**	n.s.
Early Group Salience	Intergroup Anxiety	.24**	.23**
Previous Intergroup Contact	Intergroup Anxiety	-.22**	-.22**
Understanding Friend's Group	Intergroup Anxiety	-.22**	-.25**
Interactions with OG's Family Go Well	Intergroup Anxiety	-.18*	-.18*
Backgrounds Too Different (Early)	Early Group Salience	.18*	n/a
Current Group Salience	Early Group Salience	.46**	n/a
Current Time with OG Family/Friends	Early Group Salience	-.29**	n/a
Interactions with OG's Family Go Well	Early Group Salience	-.19**	n/a
Current Warmth for Friend	Early Group Salience	-.21**	n/a
Backgrounds Too Different (Early)	Current Group Salience	.32**	n/a
Personalities Too Different (Early)	Current Group Salience	.29**	n/a
Religious Beliefs Too Different (Early)	Current Group Salience	.20**	n/a
Friendship via Early Trust	Current Group Salience	-.17*	n/a
How Often Friend Attends OG events	Current Group Salience	.25**	n/a
Current Discussions about Groups	Current Group Salience	.32**	n/a
Explaining Group Issues	Current Group Salience	.25**	n/a
Interactions with OG's Family Go Well	Current Group Salience	-.18*	n/a
Friend has Lifestyle "I'd be Proud to Have"	One's Group: Target of Prejudice	-.18*	n/a
Joining Friend in OG Events	One's Group: Target of Prejudice	.19**	n/a
Friend Understands One's Group	One's Group: Target of Prejudice	-.32**	n/a
Friend's Group: Target of Prejudice	One's Group: Target of Prejudice	.25**	n/a

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 7 - Correlations between Friendship Variables and Group Membership Variables among Cross-Race Participants Continued**

Friendship or Group Membership Variable	Group Membership Variable	<i>r</i>
Outgoingness of Friend (Early)	Friend's Group: Target of Prejudice	.18*
Friend Respected One's Views (Early)	Friend's Group: Target of Prejudice	.19**
Friend a Unique Person	Friend's Group: Target of Prejudice	.17*
Caring about One's Friend	Friend's Group: Target of Prejudice	.20**
"Friend Trusts Me"	Friend's Group: Target of Prejudice	.18*
How Often Friend Attends OG Events	Friend's Group: Target of Prejudice	.24**
Current Discussions about Groups	Friend's Group: Target of Prejudice	.21**
Friend Understands One's Group	Friend's Group: Target of Prejudice	.18*
Backgrounds Too Different (Early)	Friend Like Other OG Members	.19**
Friendship via Early Helping Each Other	Friend Like Other OG Members	.25**
Friend's Closeness to OG Family/Friends	Friend Like Other OG Members	.25**
How Often Friend Attends OG Events	Friend Like Other OG Members	.21**
Friendship via Early Trust	Interactions with OG's Family/Friends	.26**
Friendship via Early Self-disclosure	Interactions with OG's Family/Friends	.17*
Friend's Lifestyle "I'm Proud to Have"	Interactions with OG's Family/Friends	.20**
OG Family/Friends Supportive	Interactions with OG's Family/Friends	.40**
Own Family/Friends Supportive	Interactions with OG's Family/Friends	.32**
Inclusion of Friend in Self	Interactions with OG's Family/Friends	.33**
Current Trust for Friend	Interactions with OG's Family/Friends	.22**
Belief that Friend Cares	Interactions with OG's Family/Friends	.34**
Time Until Personal Info. Shared	Participant's Ethnic Identity	.17*
Friend was Unique (Early)	Participant's Ethnic Identity	.20**
Initial Nervousness when Interacting	Participant's Ethnic Identity	.20**
Friend Respected One's Views (Early)	Participant's Ethnic Identity	.20**
Current Discussions about Groups	Participant's Ethnic Identity	.20**
Explaining Group Issues	Participant's Ethnic Identity	.30**
Own Family/Friends Supportive	Participant's Ethnic Identity	.18*
OG Family/Friends Supportive	Participant's Ethnic Identity	.18*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 8** - Regression Interactions: Effects of Majority Group Status (White or Non-White) and Group Membership on Friendship Variables on Other Variables

Variable One	Variable Two	Minority <i>r</i>	White <i>r</i>	Partial <i>r</i>
Early Similarity	Friend Doesn't Judge (Early)	.53**	n.s.	-.21*
Early Welcoming	Early Nervousness	-.32*	n.s.	.21*
Early Concerns: Ethnic	Early Self-Disclosure	n.s.	.26*	.21*
Ethnic Identity	Early Concerns: One's Circle	n.s.	.30**	.19*
One's Family Supportive	Current Trust for Friend	.61***	.39**	-.33***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**TABLE 9** - Correlations between Friendship, Group Membership Variables, and Intergroup Attitudes among Cross-Race Participants (Partialing Out Social Desirability When Necessary)

Friendship or Group Membership Variable	Intergroup Attitudes	<i>r</i>	Partial <i>r</i>
Friend is Warm (Early)	Feeling Thermometer	.18*	n/a
Friend's Lifestyle "I'd be Proud to Have"	Feeling Thermometer	.25**	n/a
Backgrounds Too Different (Early)	Feeling Thermometer	-.17*	n/a
Lifestyles Too Different (Early)	Feeling Thermometer	-.19*	n/a
Friendship via Early Trust	Feeling Thermometer	.17*	n/a
Current Group Salience	Feeling Thermometer	-.23**	n/a
Current Discussions about Groups	Feeling Thermometer	-.18**	n/a
Backgrounds Too Different (Early)	Ingroup Bias	.22*	n/a
Early Concerns: OG Make it Difficult	Ingroup Bias	.20*	n/a
Friend was Unique (Early)	Subtle Prejudice	.17*	.17*
Friend's Lifestyle "I'd be Proud to Have"	Subtle Prejudice	.24**	n.s.
Friendship via Helping Each Other	Subtle Prejudice	.19*	n.s.
Friendship via Becoming Comfortable	Subtle Prejudice	.21**	n.s.
Friendship via Becoming Honest	Subtle Prejudice	.19*	n.s.
Friendship via Understanding	Subtle Prejudice	.19*	n.s.
Friendship via Early Trust	Subtle Prejudice	.24**	.22**
Friend is Unique (Current)	Subtle Prejudice	.28**	.23**
Importance of Friend (Current)	Subtle Prejudice	.24**	.19*
Current Trust for Friend	Subtle Prejudice	.17*	n.s.
Belief that Friend Trusts	Subtle Prejudice	.19*	.18*
Feeling Close	Subtle Prejudice	.17*	n.s.
Feeling that Friendship Will Continue	Subtle Prejudice	.22*	.17*
Friend's Group: Target of Prejudice	Subtle Prejudice	.38**	.33**
Current Discussions about Groups	Subtle Prejudice	.17*	n.s.
Friend Understands One's Group	Subtle Prejudice	.31**	.27**
Friend Respects One's Group	Subtle Prejudice	.38**	.33**
One Understands OG Views	Subtle Prejudice	.37**	.36**
Previous OG Contact	Subtle Prejudice	.17*	.21**
Previous Closeness to OG Members	Subtle Prejudice	.24**	.24**
Interactions with OG's Family Go Well	Subtle Prejudice	.19*	.18*
Own Family/Friends Supportive	Subtle Prejudice	.24**	.22**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 10 - Correlations between Friendship, Group Membership Variables, and Intergroup Attitudes among Cross-Race Participants (Partialing Out Social Desirability) Continued**

Friendship or Group Membership Factor	Intergroup Attitudes	<i>r</i>	Partial <i>r</i>
Friend was Welcoming (Early)	Empathy for OG	.19*	.20*
Friend was Warm (Early)	Empathy for OG	.28**	.22**
Friend was Outgoing (Early)	Empathy for OG	.17*	n.s.
Friend's Lifestyle "I'd be Proud to Have"	Empathy for OG	.28**	.27**
Friendship via Early Helping Each Other	Empathy for OG	.20*	n.s.
Friendship via Becoming Comfortable	Empathy for OG	.30**	.25**
Friendship via Becoming Honest	Empathy for OG	.33**	.29**
Friendship via Understanding	Empathy for OG	.28**	.24**
Friendship via Early Trust	Empathy for OG	.30**	.28**
Friend Wouldn't Judge (Early)	Empathy for OG	.21*	n.s.
Friend Respected One's Views (Early)	Empathy for OG	.31**	.26**
Friend is Unique (Current)	Empathy for OG	.28**	.24**
Friend is Important (Current)	Empathy for OG	.25**	.22**
Friend Cares about Participant	Empathy for OG	.20*	.31**
Current Trust for Friend	Empathy for OG	.24**	.22**
Belief that Friend Trusts	Empathy for OG	.17*	n.s.
Feeling that Friendship Will Continue	Empathy for OG	.25**	.20*
Friend's Group: Target of Prejudice	Empathy for OG	.26**	.24**
Friend Understands One's Group	Empathy for OG	.37**	.40**
Friend Respects One's Group	Empathy for OG	.33*	.31**
Friend Like Other OG Members	Empathy for OG	.35**	.34**
Interactions with OG Family/Friends	Empathy for OG	.18**	.22**
Friend's Closeness to OG Family/Friends	Empathy for OG	.18*	n.s.
Own Family/Friends Supportive	Empathy for OG	.19*	.17*
Friend Seemed Similar (Early)	Perceived Similarity	.24**	.22**
Backgrounds Too Different (Early)	Perceived Similarity	-.17*	n.s.
Early Group Salience	Perceived Similarity	-.19*	-.18*
Friend Like Other OG Members	Perceived Similarity	.18*	.17*
Friendship via Early Helping Each Other	Stereotype Truth	.17*	n.s.
Own Group: Target of Prejudice	Stereotype Truth	.19*	.19*
Previous OG Contact	Stereotype Truth	.22**	.22**
Previous Closeness to OG Members	Stereotype Truth	n.s.	.18*
Interactions with OG Family/Friends	Stereotype Truth	.20*	.21**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 11** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Friendship Factors on Other Friendship Factors

Factor 1	Factor 2	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Early Friendship Bond	Early Positive Friend Characteristics	.24**	.49***	.12*
Early Friendship Bond	Early Personality Differences (Concerns)	.09(n.s.)	-.16 (.06)	.12*
Early Friendship Bond	Current Affective Bond	.41***	.52***	.15*
Early Positive Friend Characteristics	Current Affective Bond	.29**	.38***	.12*
Early Identity Differences (Concerns)	Early Personality Differences (Concerns)	.50***	.45***	-.12*
Early Personality Differences (Concerns)	Current Affective Bond	n.s.	-.28**	-.12*
Current Friendship Actions	Current Affective Bond	.35***	.56***	.17**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 12** - Correlations between Friendship Factors and Group Membership Factors

Group Membership Factor	Friendship Factor	<i>r</i>
Role of OG & IG Families	Early Friendship Bond	.29**
Role of OG & IG Families	Current Affective Bond	.48***
Role of OG & IG Families	Current Friendship Actions	.30***
Involvement in OG & IG Activities	Current Affective Bond	.28**
Involvement in OG & IG Activities	Current Friendship Actions	.30***
Intergroup Communication	Current Friendship Actions	.30***
Intergroup Sensitivity of Friend	Early Friendship Bond	.30***
Intergroup Sensitivity of Friend	Early Positive Friend Characteristics	.41***
Intergroup Sensitivity of Friend	Early Identity Differences (Concerns)	-.25**
Intergroup Sensitivity of Friend	Early Personality Differences (Concerns)	-.17*
Intergroup Sensitivity of Friend	Current Affective Bond	.22**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 13** - Correlations between Friendship Factors, Group Membership Factors and Intergroup Attitudes

Friendship or Group Membership Factor	Intergroup Attitudes	<i>r</i>
Early Friendship Bond	Subtle Prej. (Sympathy & Admiration)	.23**
Early Friendship Bond	Empathy for Outgroup	.34***
Early Positive Friend Characteristics	Empathy for Outgroup	.23**
Current Affective Bond	Subtle Prej. (Sympathy & Admiration)	.19*
Current Affective Bond	Empathy for Outgroup	.22**
Role of OG & IG Families	Feeling Thermometer for OG	.20*
Role of OG & IG Families	Truth in OG Stereotypes	.17*
Role of OG & IG Families	Subtle Prej. (Sympathy & Admiration)	.21*
Role of OG & IG Families	Empathy for Outgroup	.19*
Intergroup Communication	Feeling Thermometer for OG	-.18*
Intergroup Sensitivity of Friend	Subtle Prej. (Sympathy & Admiration)	.34***
Intergroup Sensitivity of Friend	Empathy for Outgroup	.42***

\*  $p < .05$ , \*\*  $p < .01$



**TABLE 14** - T-test Results among Longitudinal Study Participants: Effect of Friendship Type on Depth of Self-Disclosure at All Time Points

Variable	Same-Race		Cross-Race		t- test result
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Depth of Self-Disclosure Time 1	4.50	1.50	3.50	1.60	$t(49) = 2.00^*$
Depth of Self-Disclosure Time 2	4.40	1.90	4.00	1.90	$t(49) = 0.82$ n.s.
Depth of Self-Disclosure Time 3	5.00	1.10	4.00	1.80	$t(49) = 2.13^*$

\*  $p < .05$

**TABLE 15** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Time One Friendship Variables on Other Time One Friendship Variables

Variable 1	Variable 2	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Enjoying Time with Friend	Dependability of Friend	n.s.	.71**	.44**
Enjoying Time with Friend	Friend Make's One Comfortable	n.s.	.69**	.35*
Enjoying Time with Friend	Friend Concerned for One's Wellbeing	n.s.	.66**	.39*
Enjoying Time with Friend	Trustworthiness of Friend	n.s.	.72**	.33*
Enjoying Time with Friend	One's Social Circle would Like Friend	n.s.	.59**	.30*
Liking One's Friend	Dependability of Friend	n.s.	.83**	.42*
Liking One's Friend	Friend Cares	n.s.	.65**	.35*
Liking One's Friend	Friend Respects One "As a Person"	n.s.	.67**	.34*
Friend Make's One Comfortable	One's Social Circle would Like Friend	n.s.	.60**	.37*
Trustworthiness of Friend	Liking One's Friend	n.s.	.83**	.29*
Similarity in Values	Trustworthiness of Friend	.81**	n.s.	-.27*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 16 - Time Two Friendship Variables on Other Time Two Friendship Variables**

Variable 1	Variable 2	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Enjoying Time Spent with Friend	One is Important to Friend	.62*	.76**	.47**
Liking One's Friend	One is Important to Friend	.72*	.59**	.41**
Depth of Self-Disclosure	One's Social Circle would Like Friend	.71**	.35*	.47**
Perceived Financial Similarity	Friend Respects One "As a Person"	.65**	n.s.	-.31*
Perceived Financial Similarity	Trustworthiness of Friend	.69**	n.s.	-.32*
Perceived Social Similarity	Friend Values One's Perspective	.79**	n.s.	-.31*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 17** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Time Three Friendship Variables on Other Time Three Friendship Variables

Variable 1	Variable 2	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Depth of Self-Disclosure	Dependability of Friend	n.s.	.59**	.34*
Depth of Self-Disclosure	Friend Concerned for One's Wellbeing	n.s.	.57**	.30*
Depth of Self-Disclosure	How Much Friend Missed	n.s.	.66**	.32*
Perceived "Values" Similarity	Friend Concerned for One's Wellbeing	n.s.	.50**	.20*
Perceived "Values" Similarity	Friend Knows One Well	n.s.	.65**	.39**
Closeness to Friend	Depth of Self-Disclosure	n.s.	.80**	.45**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 18** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Time One Friendship Variables on Time Two Friendship Variables

Time 1	Time 2	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Respect for One "As a Person"	Dependability of Friend	n.s.	.45**	.31*
Friend Values One's Perspective	Amount of Time Together	n.s.	.48*	.45**
Dependability of Friend	Liking One's Friend	n.s.	.47**	.45**
Friend Concerned for One's Wellbeing	Depth of Self-Disclosure	n.s.	.39*	.27*
Closeness to Friend	Trustworthiness of Friend	.58**	n.s.	-.39**
Enjoying Time Spent with Friend	Trustworthiness of Friend	.73**	n.s.	-.39**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 19** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Time One Friendship Variables on Time Three Friendship Variables

Time 1	Time 3	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Perceived Similarity "Growing-Up"	Closeness to Friend	.59**	n.s.	-.30*
Perceived Similarity "Growing-Up"	Trustworthiness of Friend	.73**	n.s.	-.28*
Friend Cares	Friend Values One's Perspective	n.s.	.42**	.39**
Friend Cares	Friend Makes One Comfortable	n.s.	.66*	.38**
Friend Cares	One is Important to Friend	n.s.	.50**	.37**
Friend Cares	One's Social Circle would Like Friend	n.s.	.33*	.27*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 20** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Time Two Friendship Variables on Time Three Friendship Variables

Time 2	Time 3	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Depth of Self-Disclosure	How Much Friend Missed	n.s.	.58**	.28*
Belief that Friendship Will Last	Spending Time with Friend	n.s.	.51**	.32*
How Often Private Info. Shared	Belief that Friendship Will Last	n.s.	.58**	.29*
Perceived "Values" Similarity	Friend Makes One Comfortable	n.s.	.48**	.28*
Perceived Personality Similarity	Friend Makes One Comfortable	n.s.	.59**	.31**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 21** - Correlations between Group Membership and Friendship Variables among Cross-Race Friendship Participants at Time One

Group Membership Variable	Friendship Variable	<i>r</i>
Friend Respects One's Ethnicity	Dependability of Friend	.53**
Friend Respects One's Ethnicity	Friend Makes One Comfortable	.37*
Friend Respects One's Ethnicity	One's Social Circle would Like Friend	.56**
Interactions with OG Family/Friends	Spending Time with Friend	.35*
Interactions with OG Family/Friends	One Knows Friend	.39*
Interactions with OG Family/Friends	Friend Knows Participant	.51**
Interactions with OG Family/Friends	One is Important to Friend	.47**
Learning New Things About OG	Frequency of Conversations	.46**
Learning New Things About OG	Spending Time with Friend	.51**
Learning New Things About OG	Closeness to Friend	.46**
Learning New Things About OG	Depth of Self-Disclosure	.40*
Learning New Things About OG	One Knows Friend	.35*
Learning New Things About OG	Friend Knows Participant	.41**
Learning New Things About OG	One is Important to Friend	.41**
Group Membership Important to Friend	Friend Respects One "As a Person"	.39*
Group Membership Important to Friend	One's Social Circle would Like Friend	.39*
Group Membership Important to Friend	One is Important to Friend	.47**

\*  $p < .05$ , \*\*  $p < .01$



**TABLE 22** - Correlations between Group Membership Variables at Time One and Friendship Variables at Time Two among Cross-Race Friendship Participants

Time 1 Group Membership Variable	Time 2 Friendship Variable	<i>r</i>
Interactions with OG Family/Friends	One Knows Friend	.35*
Interactions with OG Family/Friends	Friend Knows Participant	.39*
Interactions with OG Family/Friends	Friend Different from Other OG	-.59**
Group Membership Important to Friend	Perceived "Values" Similarity	.37*
Group Membership Important to Friend	Friend Respects One "As a Person"	.41**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 23** - Correlations between Group Membership and Friendship Variables among Cross-Race Friendship Participants at Time Two

Group Membership Variable	Friendship Variable	<i>r</i>
Intergroup Anxiety	Depth of Self-Disclosure	-.60**
Intergroup Anxiety	Friendship Will Last	-.38*
Intergroup Anxiety	Would Miss One's Friend	-.36*
Intergroup Anxiety	Closeness to Friend	-.36*
Intergroup Anxiety	Frequency of Self-Disclosure	-.40*
Intergroup Anxiety	Frequency of Conversations	-.43**
Friend has Learned about One's Group	Would Miss One's Friend	.41*
Friend has Learned about One's Group	Friend Respects One "As a Person"	.34*
Friend has Learned about One's Group	One Knows Friend	.37*
Friend Respects One's Ethnicity	Perceived Personality Similarity	.37*
Friend Respects One's Ethnicity	Perceived "Values" Similarity	.41*
Interactions with OG Family/Friends	Depth of Self-Disclosure	.51**
Interactions with OG Family/Friends	One Knows Friend	.36*
Friend Different from Other OG	Friend Values One's Perspective	.34*
Group Membership Important to Friend	Perceived "Values" Similarity	.38*
One's Appreciates Friend's Perspective	Friend Values One's Perspective	.43**
One's Appreciates Friend's Perspective	Friend Concerned for One's Wellbeing	.33*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 24** - Correlations between Group Membership Variables at Time Two and Friendship Variables at Time Three among Cross-Race Friendship Participants

Time 2 Group Membership Variable	Time 3 Friendship Variable	<i>r</i>
Friend Respects One's Ethnicity	Liking One's Friend	.37*
Friend Respects One's Ethnicity	Perceived "Values" Similarity	.63**
Friend Respects One's Ethnicity	Trustworthiness of Friend	.35*
Friend Respects One's Ethnicity	One Knows Friend	.35*
Friend Respects One's Ethnicity	One's Social Circle would Like Friend	.42**
Interactions with OG Family/Friends	Depth of Self-Disclosure	.37*
Interactions with OG Family/Friends	Perceived Financial Similarity	.52**
Interactions with OG Family/Friends	Perceived "Political" Similarity	.39*
Group Membership Important to Friend	One is Important to Friend	.38*
Friend Different from Other OG	Friend Respects One "As a Person"	.40*
Friend Different from Other OG	Perceived Financial Similarity	-.41*
Friend has "Unique Perspective" (OG)	Enjoying Time with Friend	.36*
Friend has "Unique Perspective" (OG)	Trustworthiness of Friend	.36*
One's Appreciates Friend's Perspective	Friend is Unique	.47**
One's Appreciates Friend's Perspective	Belief that Friendship Will Last	.36*
One's Appreciates Friend's Perspective	Friend is Fun	.38*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 25** - Correlations between Group Membership and Friendship Variables among Cross-Race Friendship Participants at Time Three

Group Membership Variable	Friendship Variable	<i>r</i>
Intergroup Anxiety	Closeness to Friend	-.51**
Intergroup Anxiety	Depth of Self-Disclosure	-.49**
Intergroup Anxiety	One Would Miss Friend	-.38*
Intergroup Anxiety	One Knows Friend	-.44**
Intergroup Anxiety	Friend Knows Participant	-.37*
Intergroup Anxiety	Frequency of Self-Disclosure	-.57**
Friend Learned About One's Group	Depth of Self-Disclosure	.43**
Friend Learned About One's Group	Frequency of Self-Disclosure	.41*
One Respects Friends Group	Closeness to Friend	.34*
One Respects Friends Group	Perceived "Values" Similarity	.53**
One Respects Friends Group	Trustworthiness of Friend	.38*
One Respects Friends Group	Friend Concerned for One's Wellbeing	.36*
Friend Respects One's Ethnicity	Friend is Caring	.37*
Friend Respects One's Ethnicity	Friend is Unique	.42**
Friend Respects One's Ethnicity	Trustworthiness of Friend	.44**
Interactions with OG Family/Friends	Frequency of Self-Disclosure	.38*
Interactions with OG Family/Friends	Closeness to Friend	.50**
One's Appreciates Friend's Perspective	One Would Miss Friend	.38*
One's Appreciates Friend's Perspective	Perceived Personality Similarity	.42**
One's Appreciates Friend's Perspective	Trustworthiness of Friend	.77**
One's Appreciates Friend's Perspective	Friend Concerned for One's Wellbeing	.66**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 26 - Correlations between Friendship, Group Membership Variables, and Intergroup Attitudes among Cross-Race Participants at Time One**

Friendship or Group Membership Factor	Intergroup Attitudes	<i>r</i>
Interactions with OG Family/Friends	Feeling Thermometer (Warmth)	.55**
Previous Contact with OG	Feeling Thermometer (Warmth)	.41*
Frequency of Conversations	Feeling Thermometer (Warmth)	.36*
Depth of Self-Disclosure	Feeling Thermometer (Warmth)	.42**
Perceived "Values" Similarity	Feeling Thermometer (Warmth)	.38*
One Knows Friend	Feeling Thermometer (Warmth)	.41*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 27** - Correlations between Friendship, Group Membership Variables, and Intergroup Attitudes among Cross-Race Participants at Time Two

Friendship or Group Membership Factor	Intergroup Attitudes	<i>r</i>
Interactions with OG Family/Friends	Feeling Thermometer (Warmth)	.34*
Previous Contact with OG	Feeling Thermometer (Warmth)	.40*
Learning about OG	Admiration for OG	.58**
Friend Learned about One's Group	Admiration for OG	.44**
Group Saliency	Admiration for OG	.40*
One's Appreciates Friend's Perspective	Admiration for OG	.39*
One's Ethnic Identity	Admiration for OG	.40*
One's Ethnic Identity	Sympathy for OG	.36*
Interactions with OG Family/Friends	Bias for Own Group (Warmth)	-.34*
Previous Contact with OG	Bias for Own Group (Warmth)	-.35*
Friend Different from Other OG	Bias for Own Group (Warmth)	-.34*
Depth of Self-Disclosure	Feeling Thermometer (Warmth)	.39*
Depth of Self-Disclosure	Bias for Own Group (Warmth)	-.51**
One's Social Circle would Like Friend	Bias for Own Group (Warmth)	-.37*
Friend Knows Participant	Bias for Own Group (Warmth)	-.34*
Frequency of Self-Disclosure	Bias for Own Group (Warmth)	-.36*
Frequency of Conversations	Bias for Own Group (Warmth)	-.39*
Spending Time with Friend	Bias for Own Group (Warmth)	-.38*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 28** - Correlations between Friendship, Group Membership Variables, and Intergroup Attitudes among Cross-Race Participants at Time Three

Friendship or Group Membership Variable	Intergroup Attitudes	<i>r</i>
One Respects Friends Group	Feeling Thermometer (Warmth)	.36*
Friend has Interacted with Own Family	Feeling Thermometer (Warmth)	.41*
Friend has Other IG Friends	Feeling Thermometer (Warmth)	.36*
Interactions with OG Family/Friends	Feeling Thermometer (Warmth)	.52**
Learning about OG	Feeling Thermometer (Warmth)	.37*
One's Appreciates Friend's Perspective	Feeling Thermometer (Warmth)	.44**
Friend Learned about One's Group	Admiration for OG	.47**
Group Membership Plays Role in F'ship	Admiration for OG	.47**
Friend Makes One Comfortable	Admiration for OG	.38*
Friend Values One's Perspective	Admiration for OG	.35*
Friend Concerned for One's Wellbeing	Admiration for OG	.36*
Trustworthiness of Friend	Admiration for OG	.38*
One Would Miss Friend	Bias for Own Group (Warmth)	-.40*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 29** - Correlations between Increases in Friendship Variables over Time and Intergroup Attitudes among Cross-Race Participants

Increase in Friendship Variables	Intergroup Attitudes	<i>r</i>
Liking (T1 to T2)	T2 Feeling Thermometer	-.36*
Similarity: Social Activities (T1 to T2)	T2 Feeling Thermometer	-.35*
Friend Dependable (T1 to T2)	T2 Feeling Thermometer	-.44*
Similarity: Social Activities (T1 to T2)	T2 Admiration for OG	.40*
Spending Time with Friend (T1 to T3)	T3 Admiration for OG	.38*
Enjoying Time with Friend (T1 to T3)	T3 Sympathy for OG	.34*
Friend Knows One (T1 to T3)	T3 Sympathy for OG	.38*
F Concerned for Wellbeing (T2 to T3)	T3 Feeling Thermometer	.36*
Closeness (T2 to T3)	T3 Admiration for OG	.38*
Similarity: Values (T2 to T3)	T3 Sympathy for OG	.41*
F Concerned for Wellbeing (T2 to T3)	T3 Bias	-.36*

\*  $p < .05$ , \*\*  $p < .01$



**TABLE 30** - Regression Interactions: Effects of Friendship Type (Cross-Race or Same-Race) and Friendship Factors on Other Friendship Factors

Factor 1	Factor 2	Same <i>r</i>	Cross <i>r</i>	Partial <i>r</i>
Friend's Interest in One (T2)	Positive Friend Attributes (T2)	.81**	.53**	-.36**
Friend's Interest in One (T3)	Identity Similarity (T3)	n.s.	.57***	.33*
Affect for Friend (T1)	Positive Friend Attributes (T1)	n.s.	.70***	.37**
Identity Similarity (T1)	Personal Similarity (T1)	.70**	n.s.	-.28*

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 31** - Correlations between Friendship Factors and Group Membership Factors

Group Membership Factor	Friendship Factor	<i>r</i>
Group Impact (T1)	Friend's Interest in One (T1)	.51**
Group Impact (T3)	Friend's Interest in One (T3)	.35*
Mutual Respect for Groups (T2)	Positive Friend Attributes (T3)	.36*
Mutual Respect for Groups (T2)	Personal Similarity (T2)	.42*
Mutual Respect for Groups (T2)	Personal Similarity (T3)	.49**
Mutual Respect for Groups (T3)	Affect for Friend (T3)	.37*
Mutual Respect for Groups (T3)	Positive Friend Attributes (T3)	.42*
Appreciation for OG (T3)	Affect for Friend (T3)	.40*
Appreciation for OG (T3)	Positive Friend Attributes (T3)	.56**

\*  $p < .05$ , \*\*  $p < .01$

**TABLE 32 - Correlations between Group Membership Factors and Intergroup Attitudes**

Group Membership Factor	Intergroup Attitudes	<i>r</i>
Group Impact (T1)	IG Bias (T1)	-.38*
Group Impact (T2)	OG Admiration (T2)	.46**
Group Impact (T2)	Feeling Thermometer (T3)	.47**
Group Impact (T2)	IG Bias (T3)	-.35*
Group Impact (T3)	Feeling Thermometer (T3)	.52**
Group Impact (T3)	IG Bias (T3)	-.38*
Appreciation for OG (T2)	OG Admiration (T2)	.39*
Appreciation for OG (T2)	OG Admiration (T3)	.34*
Appreciation for OG (T2)	Feeling Thermometer (T3)	.38*
Appreciation for OG (T2)	IG Bias (T3)	-.34*
Appreciation for OG (T3)	Feeling Thermometer (T3)	.38*
Appreciation for OG (T3)	OG Admiration (T3)	.41*
OG Admiration (T1)	Mutual Respect for Groups (T3)	.41*
OG Sympathy (T1)	Mutual Respect for Groups (T3)	.43*

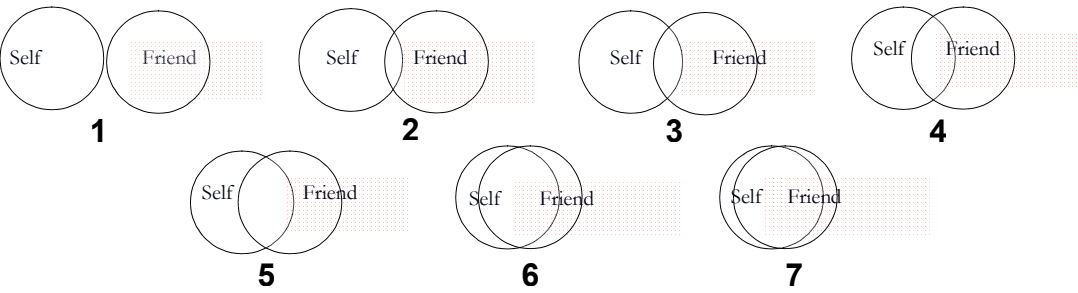
\*  $p < .05$ , \*\*  $p < .01$

**TABLE 33** - Correlations between Increases in Friendship Factors over Time and Intergroup Attitudes

Increase in Friendship Factor (T2 to T3)	Intergroup Attitudes (T3)	<i>r</i>
Positive Friend Attributes	Feeling Thermometer	.39*
Personal Similarity	OG Sympathy	.37*
Increase in Friendship Factor (T1 to T3)	Intergroup Attitudes (T3)	<i>r</i>
Friend's Interest in One	OG Admiration	.36*
Identity Similarity	OG Admiration	.41*
Identity Similarity	OG Sympathy	.41*

$p < .05$ , \*\*  $p < .01$

**FIGURE 1 – Inclusion of Other in Self Scale (Aron, Aron & Smollan, 1992)**



## Appendix 1

### Friendship Development Survey (Study 1: Retrospective)

#### A. Background Information

1. What is your gender?
2. What is your age?
3. Where do you currently live?
  - a) United States (in the North East)
  - b) United States (in the South East)
  - c) United States (in the South West)
  - d) United States (in the West, including California)
  - e) United States (in the Mid-West)
  - f) Canada
  - g) Mexico
  - h) South America
  - i) Europe
  - j) Africa
  - k) The Middle East
  - l) Asia
  - m) Australia
  - n) New Zealand
  - o) I am currently serving in the Military (PLEASE tell us which country you are serving and where currently stationed BELOW)
- OTHER (please describe)
4. Please tell us your general ethnic background.
  - a) African (Black)
  - b) Asian
  - c) Caribbean
  - d) European (White)
  - e) Hispanic or Latino
  - f) Middle Eastern
  - g) Pacific Islander
  - h) Russian
  - i) South Asian
- OTHER (please describe)
5. What countries or parts of the world are your ancestors from?

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6. How did you hear about this survey?
  - a) Email

- b) Facebook.com or Myspace.com
- c) Craigslist.com
- d) Flier posted in my neighborhood
- e) Announcement in my church
- f) Announcement in my residence community

OTHER (please describe)

Number of Years \_\_\_\_\_

Number of Months \_\_\_\_\_

My age (in years) was \_\_\_\_\_

My friend's age (in years) was \_\_\_\_\_

## B. Questions About Meeting and Getting to Know One's Friend

7. Where did you meet?

- a) In grade school or high school
- b) In a college classroom or college activity group
- c) In the neighborhood
- d) He/she was a friend of a friend of mine
- e) At work
- f) Other (please describe)
- g) Response
- h) Degree of Choice:

Other (please describe)

8. Did you CHOOSE to speak with \_\_\_\_\_ or did you HAVE TO interact because of the situation? (For example, if you had to work together)

(Please answer on a scale from 1 to 7, with 1 meaning you had to interact, and 7 meaning that you had complete choice to interact)

9. When you were FIRST GETTING TO KNOW \_\_\_\_, how much did the following things MAKE YOU THINK that \_\_\_\_ MIGHT make a good friend?

(Please answer on a scale from 1 to 7, with 1 meaning "Not At All" and 7 meaning "Very Much")

- a) \_\_\_\_ seemed similar to me
- b) \_\_\_\_ made me feel welcome, and included
- c) \_\_\_\_ was a very warm, kind person
- d) \_\_\_\_ was very outgoing and friendly towards me
- e) \_\_\_\_ was a unique individual who was different from my other friends
- f) \_\_\_\_ was fun to do activities with
- g) \_\_\_\_ was already friends with people in my friendship group
- h) \_\_\_\_ had personal qualities or characteristics that I'd be proud to have
- i) \_\_\_\_ had a lifestyle that I'd be proud to have
- j) Other (please describe)

10. When you were getting to know \_\_\_\_\_, did any of the following things make you think that he/she might NOT make a good friend? (Select all that apply)

NONE of the below; \_\_\_\_\_ seemed like a good friend right away

- a) \_\_\_\_\_ seemed uninterested in being friends at first
- b) \_\_\_\_\_ seemed very shy
- c) \_\_\_\_\_ seemed too outgoing
- d) \_\_\_\_\_ seemed stuck-up or arrogant
- e) \_\_\_\_\_ seemed mean or unfriendly
- f) \_\_\_\_\_ seemed like an airhead and/or not very bright
- g) \_\_\_\_\_ seemed too different from me

11. How long after you met \_\_\_\_\_ did the following things happen?

(Please answer on a scale from 1 to 7 with 1 meaning "Right Away" and 7 meaning "After Many Interactions")

- a) How long until you felt you might become friends?
- b) How long until the two of you shared very secret, personal information?

12. How true are the following statements?

(Please answer on a scale from 1 to 7, with 1 meaning "Not at All" true and 7 meaning "Very Much" true)

"When I was FIRST GETTING TO KNOW \_\_\_\_\_,

I WASN'T SURE that we COULD BECOME FRIENDS because I felt that..."

- a) It might be too hard to travel to see each other
- b) Our personalities might be too different
- c) Our lifestyles or personal interests might be too different
- d) Our ethnic or cultural backgrounds might be too different
- e) Our religious beliefs might be too different
- f) Our financial situations (or income level) might be too different
- g) Our political beliefs might be too different
- h) Other people in his/her life would make it difficult
- i) Other people in MY life would make it difficult

13. How nervous did you feel when first interacting with \_\_\_\_\_? nervous?

(Please answer on a scale from 1 to 7, with 1 meaning "Not At All" and 7 meaning "Very Much")

### C. Becoming Friends

14. How much are each of the following statements true?

(Please answer on a scale from 1 to 7, with 1 meaning "Not at All" true and 7 meaning "Very Much" true)

Please think back to the time when you and \_\_\_\_\_ were just starting to become friends

"I STARTED to think of \_\_\_\_\_ as my friend because..."



- a) We started sharing personal information (things you wouldn't tell everyone)
- b) We started to help each other with things
- c) We started feeling comfortable being ourselves around each other
- d) We began to be completely honest with each other
- e) We began to understand each other better
- f) We began to develop strong trust for each other
- g) I realized that \_\_\_ wouldn't judge me
- h) I realized that \_\_\_ respected my views about things

15. How much did \_\_\_ do any of the following to show that he/she wanted to be your friend? (Check ALL that apply)

- a) \_\_\_\_\_ talked to me a lot.
- b) \_\_\_\_\_ wanted to exchange contact information.
- c) \_\_\_\_\_ invited me to do little things like sit next to him/her, have lunch etc.
- d) \_\_\_\_\_ always said hello and asked how I was doing
- e) \_\_\_\_\_ invited me to do activities
- f) \_\_\_\_\_ invited me over to his/her house
- g) \_\_\_\_\_ seemed interested in learning about my background
- h) \_\_\_\_\_ and I were "instant" friends!

#### D. Current Friendship Variables

16. Give us your CURRENT thoughts and feelings. (How you feel NOW)  
(You will use a scale that runs from 1 to 7, with 1 meaning "Not At All" and 7 meaning "Very Much")

- a) Is \_\_\_ a unique person?
- b) Is \_\_\_ important to you?
- c) Do you care about \_\_\_?
- d) Do you tell very personal information to \_\_\_?
- e) Do you trust \_\_\_?
- f) Do you feel close to \_\_\_?
- g) Do you feel emotional warmth (liking or love) for \_\_\_?
- h) Do you think that you are important to \_\_\_?
- i) Do you think that \_\_\_ cares about you?
- j) Do you think that \_\_\_ trusts you?

-----See Figure One-----

(Inclusion of Other in Self; Aron, Aron & Smollan, 1992)

17. Please choose the number below the PICTURE ABOVE that best describes your current relationship to your friend.

"Our friendship is most like picture number..." (1-7)

18. How often do the following things happen?

(Use the below scale running from 1 to 7, with 1 meaning "Never" and 7 meaning "Every Day")

- a) How often do you and \_\_\_ spend time together, in person?
- b) How often do you and \_\_\_ communicate using the phone or the internet?
- c) How often does \_\_\_ ask about your issues/problems?
- d) How often does \_\_\_ ask for details about how your life is going?
- e) How often does \_\_\_ offer to help you with something?
- f) How often does \_\_\_ tell you that he/she cares about you?

19. What are some of the good things about being friends with \_\_\_?

(Select All that apply)

- a) I can share more personal details with \_\_\_\_\_
- b) I can be myself around \_\_\_\_\_
- c) I can count on \_\_\_\_\_ to help me with anything
- d) \_\_\_\_\_ is a kinder person than most people
- e) \_\_\_\_\_ and I have a lot of history together
- f) I have had meaningful experiences with \_\_\_\_\_ that I haven't with anyone else

20. What things would you do for \_\_\_ that you would NOT do for other people who you feel LESS CLOSE to? (Select All that apply)

- a) Lend \_\_\_ money
- b) Give up my time to help \_\_\_ with something
- c) Travel long distances to see \_\_\_\_\_
- d) Help \_\_\_ with a favor or project that requires a lot of time and/or effort

21. How do you feel about the future of your friendship?  
“I feel that our friendship will....” (1 – 7; “Definitely End” – “Definitely Continue”)

22. Which of the following things that may harm your friendship are **LIKELY** to happen?  
(Check ALL that you think might happen)

- a) I will move away
- b) \_\_\_\_\_ will move away
- c) I will not have enough money to visit
- d) \_\_\_\_\_ will not have enough money to visit
- e) I will become too busy with my work
- f) \_\_\_\_\_ will become too busy with work
- g) I will become busy with my marriage or romantic life
- h) \_\_\_\_\_ will become too busy with marriage or romantic life
- i) I will become to busy with my children
- j) \_\_\_\_\_ will become too busy with children
- k) My interests will change and we will have less in common
- l) \_\_\_\_\_'s interests will change and we will have less in common
- m) Issues relating to my ethnicity, culture or religion will make it too difficult
- n) Issues relating to \_\_\_\_\_'s ethnicity, culture or religion will make it too difficult
- o) Our friendship is too strong to ever end

#### E. Cross-Group Friendships

23. When you **FIRST MET** \_\_\_\_\_, did his/her **ETHNIC BACKGROUND** make you feel or think any of the following things?

(Please select ALL that apply - it is possible for a person to feel many different emotions at the same time)

- a) it made me a little nervous to interact with him/her
- b) it made me very nervous to interact with him/her
- c) it made me unsure of whether we'd have anything in common
- d) it made me excited because I might learn something new
- e) it made me excited because I like it when people are different
- f) it made me excited because I like his/her specific ethnic group and \_\_\_\_\_ was a member of that group
- g) I didn't really feel nervous or excited due to his/her ethnic background

24. Back when you first met \_\_\_\_\_, during your **FIRST FEW INTERACTIONS** with him/her, how much did you notice that he/she had a different ethnicity than you? How much did it attract your attention?

(Use a scale running from 1 to 7, with 1 meaning "Not At All" and 7 meaning "Very Much")

- a) During our very first interactions I noticed \_\_\_\_'s different ethnicity...
- b) NOW, I notice \_\_\_\_'s different ethnicity...

25. In your opinion, how much have the ethnic groups that you and \_\_\_\_ belong to EVER been the targets of unequal treatment, bias or prejudice?

(EVER meaning now OR in the past; 1=Never, 7 = Many Times)

- a) How much has YOUR group EVER been the target of prejudice?
- b) How much has \_\_\_\_'s group EVER been the target of prejudice?

26. HOW OFTEN do the following things happen?

(1 = Never, 7 = Every Day)

- a) How often does \_\_\_\_ do things relating to his/her ethnic or racial background? (like make/eat ethnic food, listen to ethnic music or watch ethnic TV/Movies)
- b) How often does \_\_\_\_ go to events or gatherings where most of the people are from his/her ethnic background?
- c) How often do you join \_\_\_\_ in any of the activities above?
- d) And how often does \_\_\_\_ join YOU in any activities relating to YOUR ethnic/racial background?
- e) How often do you and \_\_\_\_ discuss issues relating to your ethnic/racial backgrounds with each other?
- f) How often do either of you explain things about your group to each other, such as their opinions or viewpoints about something, or their behavior?

27. Please answer the following questions using a scale from 1 to 7, with 1 meaning "Not At All" and 7 meaning "Very Much"

- a) How much do you think \_\_\_\_ understands the views and behaviors of your group?
- b) How much do you think \_\_\_\_ respects your group?
- c) How much is \_\_\_\_ like other members of his/her ethnic group, overall?
- d) How much are you able to understand his/her group- their views about things and their actions or behaviors?
- e) How much do you empathize or "feel" for his/her group?
- f) Before you met \_\_\_\_ did you ever have any contact with \_\_\_\_'s ethnic group in school, work or your neighborhood?
- g) Have you ever been close to anyone from another ethnic group before?

28. Please answer the following questions using a scale from 1 to 7, with 1 meaning "Not At All" and 7 meaning "Very Much"

- a) Do you ever spend time with \_\_\_\_'s friends or family members? (who are also from his/her ethnic group)

- b) Do interactions that you have with \_\_\_'s friends or family members go well?
- c) Are \_\_\_'s friends and family members supportive of your friendship?
- d) Is \_\_\_ close to his/her friends and family members from his/her ethnic group?
- e) And are your friends/family members from your ethnic group supportive of your mixed race friendship?

29. How is this friendship different from friendships you have with people in your own ethnic or racial group?

- a) I can speak another language with friends from my ethnicity
- b) I don't have to explain certain cultural issues to friends from my ethnicity
- c) I have more in common with my friends from my ethnicity
- d) I am generally closer to my friends from my ethnicity
- e) There is no difference

30. For the following two questions, use a scale that runs from 1 to 7, with 1 meaning "Never" and 7 meaning "Very Often"

- a) How often have you felt sympathy for this group?
- b) How often have you felt admiration for this group?

31. Think of a thermometer that goes from 0 degrees (coldest) to 100 degrees (warmest). Use this thermometer to describe how cold or warm you feel towards your friend's racial or ethnic group.

Temperature for this group = \_\_\_\_\_

32. How much do you agree that there is some truth in the stereotypes or generalizations about this ethnic or racial group?

(1 = Not At All, 7 = Very Much)

The Stereotypes are True \_\_\_\_\_

33. Imagine you are in a room where everyone else in the room is from this ethnic group – How would you feel?

Use a scale that runs from 1 to 7, with 1 meaning "Relaxed" and 7 meaning "Nervous"

I would feel... \_\_\_\_\_

34. How Similar OR Different is YOUR ethnic group and \_\_\_'s ethnic group?

F. Questions about the PARTICIPANT

35. Please tell us how much you agree with the following statements

(Using a scale from 1 to 7, with 1 meaning "Strongly Disagree" and 7 meaning "Strongly Agree")

- a) I am different from most people in my ethnic group
- b) I feel good about my cultural or ethnic background (MEIM)
- c) I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs (MEIM)
- d) I am active in organizations or social groups that include mostly members of my own ethnic group (MEIM)
- e) Because of my personal values, I think using stereotypes about people of other ethnicities is wrong (Social Desirability)
- f) I try to appear non-prejudiced towards people from other ethnic groups in order to avoid disapproval (Social Desirability)

36. For the following questions, please use the below scale running from 1 to 7, with 1 meaning "Not at All" and 7 meaning "Very Much"

How much do you see yourself as being... (TIPI)

- a) Extraverted, enthusiastic
- b) Critical, quarrelsome
- c) Dependable, self-disciplined
- d) Anxious, easily upset
- e) Open to new experiences, complex
- f) Reserved, quiet
- g) Sympathetic, warm
- h) Disorganized, careless
- i) Calm, emotionally stable
- j) Conventional, uncreative

37. How often do you feel the following ways?

Use a scale that runs from 1 to 7, with 1 meaning "Never" and 7 meaning "Very Often"  
I feel...

- a) Sympathy for people having a Black or African racial background
- b) Sympathy for people having an Asian racial background
- c) Sympathy for people having a Hispanic or Latino racial background
- d) Sympathy for people having a White or European racial background
- e) Admiration for people having a Black or African racial background
- f) Admiration for people having an Asian racial background
- g) Admiration for people having a Hispanic or Latino racial background
- h) Admiration for people having a White or European racial background

38. Please use a scale from 1 to 7 with 1 meaning "Not At All" and 7 meaning "Very Much" to answer the following:

- a) How much do you "understand" people with a Black or African background?
- b) How much do you "feel" for people with a Black or African background?
- c) How much do you "understand" people with an Asian background?

- d) How much do you "feel" for people with an Asian background?
- e) How much do you "understand" people with a Hispanic or Latino background?
- f) How much do you "feel" for people with an Hispanic or Latino background?
- g) How much do you "understand" people with a White or European background?
- h) How much do you "feel" for people with a White or European background?

39. How much do you agree with the following statements?

Use a scale running from 1 to 7, with 1 meaning "Strongly Disagree" and 7 meaning "Strongly Agree"

I believe there is SOME TRUTH in the STEREOTYPES or generalizations about...

- a) ...people with an African background
- b) ...people with an Asian background
- c) ...people with a Hispanic or Latino background
- d) ...people with a White or European background

40. Please tell us how you would feel in the following situations, using a scale running from 1 to 7, with 1 meaning "Relaxed" and 7 meaning "Nervous"

How would you feel if you were in a room where you were the ONLY person from YOUR ethnic background and EVERYONE ELSE was...

- a) ...African
- b) ...Asian
- c) ...Hispanic or Latino
- d) ...White or European

41. How SIMILAR OR DIFFERENT do you feel YOUR ethnic group is to OTHER ethnic groups?

42. How SIMILAR OR DIFFERENT is your group to those with an Asian background?

43. How SIMILAR OR DIFFERENT is your group to those with a Hispanic or Latino background?

44. How SIMILAR OR DIFFERENT is your group to those with a White or European background?

45. How SIMILAR OR DIFFERENT is your group to those with a White or European background?

46. Think of a thermometer that goes from 0 degrees (coldest) to 100 degrees (warmest). Use this thermometer to describe how cold or warm you feel towards the following groups.

You can choose any temperature between 0 and 100

- a) Temperature for people with a Black or African ethnicity
- b) Temperature for people with an Asian ethnicity

- c) Temperature for people with a Hispanic or Latino ethnicity
- d) Temperature for people with a White or European ethnicity



## Appendix 2

### Friendship Development Survey (Study 2: Longitudinal)

\* indicates item at Time 2 & 3 only

All items on 7 point scale unless otherwise noted

1. In the last few weeks, how often have you had conversations with \_\_\_\_? (5 = Very Often)
2. In the last few weeks, how often have you spent time with your potential friend in person (e.g., doing activities, hanging out etc.)? (5 = Very Often)
3. How much do you enjoy spending time or hanging out with this person? (5 = Very Often)
4. At this moment, how close would you say you are to this person?
5. How much do you like this person, overall?
6. \*How unique of a person is \_\_\_\_?
7. How personal was the most personal or sensitive thing (something you wouldn't tell most people) you have ever discussed with this person?
8. \*How much would you miss \_\_\_\_ if you could not see each other or speak for a month?
9. \*What is the likelihood that your relationship with \_\_\_\_ will continue several years into the future?
10. How similar are you and \_\_\_\_ in terms of PERSONALITY CHARACTERISTICS?
11. How similar are you and \_\_\_\_ in terms of VALUES?
12. How similar are you and \_\_\_\_ in terms of INTEREST IN SOCIAL ACTIVITIES?
13. How similar are you and \_\_\_\_ in terms of INTELLECTUAL/ACADEMIC INTERESTS?
14. How similar are you and \_\_\_\_ in terms of POLITICAL VIEWS?
15. How similar are you and \_\_\_\_ in terms of Your families' financial situation or INCOME LEVEL?
16. How similar are you and \_\_\_\_ in terms of SOCIAL ENVIRONMENT you GREW UP in (your neighborhood, friends, how you were raised etc.)
17. I can depend on \_\_\_\_ to help me when I need it.
18. \_\_\_\_ makes me feel comfortable and at ease.
19. \_\_\_\_ is a caring and considerate person.
20. \_\_\_\_ values my perspective of things.
21. \_\_\_\_ is concerned for my well being.
22. \_\_\_\_ is trustworthy
23. \_\_\_\_ respects me as a person.
24. The other people in my social circle would (or do) like \_\_\_\_.
25. I know \_\_\_\_ very well.
26. \_\_\_\_ knows me very well.

27. I am important to \_\_\_\_.
28. \_\_\_\_ is fun to do things with.
29. \*In the PAST MONTH, how often have you and \_\_\_\_ shared your private opinions about a topic?
30. \*In the PAST MONTH, how often have you and \_\_\_\_ discussed issues relating to other people you both know (“Gossip”)?
31. \*In the PAST MONTH, how often have you and \_\_\_\_ discussed issues relating to your romantic lives, such as boyfriends/girlfriends, dating or “hooking up”?
32. \*In the PAST MONTH, how often have you and \_\_\_\_ discussed a personal problem one of you is having?
33. \*In the PAST MONTH, how often have you and \_\_\_\_ hung out together off of campus?
34. \*In the PAST MONTH, how often have you and \_\_\_\_ drank alcohol or used recreational drugs together?
35. \*In the PAST MONTH, how often have you and \_\_\_\_ gone to a movie?
36. \*In the PAST MONTH, how often have you and \_\_\_\_ shared a meal?
37. \*In the PAST MONTH, how often have you and \_\_\_\_ “goofed around” such as play-fighting or wrestling?
38. \*In the PAST MONTH, how often have you and \_\_\_\_ high-fived, shook hands, or patted backs?
39. \*In the PAST MONTH, how often have you and \_\_\_\_ participated in an athletic activity or worked out together?
40. \*In the PAST MONTH, how often have you and \_\_\_\_ played a video game together?
41. \*In the PAST MONTH, how often have you and \_\_\_\_ spoke on the phone?
42. \*In the PAST MONTH, how often have you and \_\_\_\_ e-mailed, text messaged or instant messaged each other?
43. \*In the PAST MONTH, how often have you and \_\_\_\_ hugged?
44. \* \_\_\_\_ has interacted with some of my friends or family members of MY ethnicity.
45. \* \_\_\_\_ has learned new things about my ethnic group because of meeting me.
46. \*I respect \_\_\_\_’s ethnicity and/or cultural background
47. \_\_\_\_ respects my ethnicity and/or cultural background
48. I have interacted with some of \_\_\_\_’s friends or family who belong to his/her ethnic group.
49. I have learned new things about \_\_\_\_’s ethnic group because of meeting him/her.
50. I believe that \_\_\_\_’s ethnic background plays an important role in his/her life.
51. \_\_\_\_ is different from most people in his/her ethnic group.
52. "Before meeting \_\_\_\_, I had many experiences interacting with members of his/her ethnic group in my neighborhood, school, or workplace."
53. Before meeting \_\_\_\_, I already had friends from his/her group.
54. \*I often find myself thinking about the ways that \_\_\_\_’s racial or ethnic background is similar or different from mine.
55. \* \_\_\_\_ often has a unique perspective of things due to his/her racial or ethnic background

56. \*I am able to appreciate \_\_\_'s unique perspective
57. \*Our racial/ethnic backgrounds play a role in our relationship.
58. \*I am different from most people in my ethnic group.
59. \*I feel good about my cultural or ethnic background.
60. \*I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.
61. I am active in organizations or social groups that include mostly members of my own ethnic group.
62. Because of my personal values, I think using stereotypes about people of other ethnicities is wrong.
63. I attempt to appear non-prejudiced towards people from other ethnic groups in order to avoid disapproval from others.
64. Extroverted, enthusiastic (I see myself as...)
65. Critical, quarrelsome (I see myself as...)
66. Dependable, self-disciplined (I see myself as...)
67. Anxious, easily upset (I see myself as...)
68. Open to new experiences, complex (I see myself as...)
69. Reserved, quiet (I see myself as...)
70. Sympathetic, warm (I see myself as...)
71. Disorganized, careless (I see myself as...)
72. Calm, emotionally stable (I see myself as...)
73. Conventional, uncreative (I see myself as...)
74. Please enter a number between 0 and 100 indicating how warmly you feel towards MUSLIM AMERICANS
75. Please enter a number between 0 and 100 indicating how warmly you feel towards AFRICAN AMERICANS
76. Please enter a number between 0 and 100 indicating how warmly you feel towards ASIAN AMERICANS
77. Please enter a number between 0 and 100 indicating how warmly you feel towards LATINO/A AMERICANS
78. Please enter a number between 0 and 100 indicating how warmly you feel towards WHITE OR EUROPEAN AMERICANS
79. Please enter a number between 0 and 100 indicating how warmly you feel towards INDIAN AMERICANS (From India, NOT Native Americans)
80. Please enter a number between 0 and 100 indicating how warmly you feel towards CARIBBEAN AMERICANS
81. How often have you felt sympathy for African Americans as a group?
82. How often have you felt admiration for African Americans as a group?
83. How much do you agree that there is some truth in the stereotypes or generalizations about African Americans?
84. How often have you felt sympathy for Asian Americans as a group?
85. How often have you felt admiration for Asian Americans as a group?

86. How much do you agree that there is some truth in the stereotypes or generalizations about Asian Americans?
87. How often have you felt sympathy for Latino/a Americans as a group?
88. How often have you felt admiration for Latino/a Americans as a group?