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Humans, as discriminately social creatures, make frequent judgments about others' suitability for interdependent social relations. Which characteristics of others guide these judgments and, thus, shape patterns of human affiliation? Extant research is only minimally useful for answering this question. On the basis of a sociofunctional analysis of human sociality, the authors hypothesized that people highly value trustworthiness and (to a lesser extent) cooperativeness in others with whom they may be interdependent, regardless of the specific tasks, goals, or functions of the group or relationship, but value other favorable characteristics (e.g., intelligence) differentially across such tasks, goals, or functions. Participants in 3 studies considered various characteristics for ideal members of interdependent groups (e.g., work teams, athletic teams) and relationships (e.g., family members, employees). Across different measures of trait importance and different groups and relationships, trustworthiness was considered extremely important for all interdependent others; the evidence for the enhanced importance of cooperativeness across different interdependence contexts was more equivocal. In contrast, people valued other characteristics primarily as they were relevant to the specific nature of the interdependent group or relationship. These empirical investigations illuminate the essence of human sociality with its foundation of trust and highlight the usefulness of a theoretically derived framework of valued characteristics.

Keywords: trustworthiness, cooperation, relationships, groups, personality

Imagine we could design our perfect relationship partners and group members—ideal romantic partners, family members, work group members, athletic team members, and so on. What characteristics would we give them? Would some characteristics emerge as more important than others? If so, which ones? Why these qualities instead of others?

In a world in which humans have some degree of choice about whom to affiliate with, the above questions force us to peek into the very core of what it means to be social. Affiliation choices are necessarily discriminatory in the sharpest sense of the word, in that people must choose some individuals over others (Kurzban & Leary, 2001; Kurzban & Neuberg, 2005): Although the number of possible affiliates appears to be nearly limitless in modern society, the reality is that we each have "room" for only so many friends, so many business partners, so many research collaborators, and so many lovers (Dunbar, 1993; Tooby & Cosmides, 1996). So we must discriminate among potential associates, partially on the basis of our assessments of their personal attributes. An in-depth understanding of valued characteristics should therefore benefit substantially both theoretical and applied investigations of friendship networks, organizational systems, romantic relationships, and other contexts in which people interact with one another.

We begin our investigation by exploring the social psychological literature for insights into what person characteristics people value in others. We then present our own approach to these issues—one based on a sociofunctional framework we have been developing to better understand intragroup and intergroup processes more generally.

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Extant Approaches

Research by Anderson

In his famous survey, Norman Anderson (1968) obtained normative likableness ratings of 555 personality trait adjectives. Emerging as the ten most likable characteristics were *sincere* (most likable), *honest*, *understanding*, *loyal*, *truthful*, *trustworthy*, *intelligent*, *dependable*, *open-minded*, and *thoughtful*. Although likability is conceptually different than importance, likability and importance may well be highly correlated in many contexts. One might thus predict that individuals will highly value others' features related to honesty, kindness, and intelligence.

Research on Close Relationships

Whether selecting friends or lovers, people exhibit clear preferences for particular characteristics in their relationship partners. For example, people report greater interpersonal attraction toward highly physically attractive others than toward less physically attractive others (e.g., Berscheid & Walster, 1974; Eagly, Ashmore, Makhijani, & Longo, 1991) and toward those who are similar to them in personality (Barry, 1970; Neimeyer & Mitchell, 1988; Tharp, 1963), attitudes (Byrne, 1971; Newcomb, 1961), and physical appearance (Berscheid, Dion, Walster, & Walster, 1971; Feingold, 1988). Moreover, research focusing on the characteristics desired when choosing a romantic partner reveals that men and women agree greatly on the characteristics most valued in a mate—kindness, understanding, and intelligence—while also demonstrating a few important differences: Men place greater importance on physical attractiveness and youth than women do, whereas women place greater importance on social status and resource potential than men do (Buss, 1989). In addition, recent research on the ideals standards model (Fletcher & Simpson, 2000; Fletcher, Simpson, & Thomas, 2000; Fletcher, Simpson, Thomas, & Giles, 1999) highlights the importance of three factors—warmth/loyalty, vitality/attractiveness, and status/resources—for ideal romantic partners.

With respect to close relationships, then, similarity, kindness, intelligence, physical attractiveness and youth, status potential, and loyalty would appear to be important. Moreover, because dyadic relationships are hypothesized as the foundations for larger groups (Moreland, 1987), these same characteristics that support close relationships may also support small groups.

Research on Human Values

As people navigate their social landscapes, they often strive to live according to a set of values. It seems plausible that these values may influence the qualities people desire in others.

Rokeach (1973) generated a list of 18 instrumental values (i.e., desirable modes of conduct), which may be of particular interest because they are viewed as influencing the manner in which people live their lives and conduct their social interactions. Asked to rate their importance as guiding principles in life, people indicated that highly important instrumental values include honesty (most important), ambition, responsibility, forgivingness, and broadmindedness. Similarly, Schwartz (1992) developed a set of 15 value types expected to serve as guiding principles in one's life. Across many individuals and many countries, people consistently place greatest importance on values related to what the researchers labeled as benevolence (e.g., honesty, loyalty, helpfulness, forgivingness, responsibility; Schwartz & Bardi, 2001). Although this genre of research was designed to characterize the general ideals that people hope to follow, one might reasonably predict that individuals will highly value others' features related to these ideals—honesty, responsibility, forgivingness, ambition, and broadmindedness.

Research on the Five-Factor Model of Personality

The five-factor model of personality (Costa, McCrae, & Dye, 1991; Digman, 1990; Goldberg, 1990; John, 1990; Wiggins, 1996) is an empirically derived framework for understanding personality structure. In general, this model proposes that individual differences in human personality are structured along five dimensions: *extraversion*, *agreeableness*, *conscientiousness*, *openness to experience*, and *emotional stability*. According to the lexical hypothesis (Saucier & Goldberg, 1996), these so-called Big Five traits possess a meaningful status in human behavior because the frequency with which an attribute occurs in a human language is presumed to be a direct indicator of its general importance to human behavior.

Several evolution-inspired analyses of the five-factor model have expanded this initial interpretation. Emphasizing humans' evolved social nature, Hogan (1996) and Buss (1996) have independently suggested that individual differences provide people with valuable social information about whether others are likely to facilitate or interfere with a particular social goal (e.g., establishing status, seeking mates). Moreover, because each trait offers different social information (e.g., extraversion indicates one's leadership potential, openness to experience indicates one's problem-solving potential), individuals are able to use their assessments of others' personality profiles to predict how different configurations of traits might influence different social goals. The Big Five factors may therefore be critical dimensions necessary for selecting others likely to be valuable friends, mates, allies, and so on.

Consistent with these perspectives, then, one might predict that individuals will highly value others' features related to the Big Five traits—extraversion, agreeableness, conscientiousness, openness to experience, and emotional stability.

Comments on Extant Perspectives

In its own way, each approach contributes to an understanding of valued characteristics. None, however, were specifically designed to address our broader set of questions and thus are understandably limited in their ability to do so. Four limitations stand out. Although none of these apply to all approaches, we believe these four limitations characterize the body of extant research on the whole.

Variability Among Perspectives in the Traits Suggested as Highly Important

There is a certain degree of incompatibility among these perspectives in the traits they imply as holding special importance. For example, whereas characteristics and values related to honesty emerged prominently in research by Anderson (1968), Rokeach (1973), and Schwartz (1992), they receive minimal attention

within the Big Five approach, buried as they are within one of six subfacets (i.e., Straightforwardness) of the Agreeableness factor (Costa et al., 1991); whereas characteristics related to physical attractiveness and similarity emerge from research on friendships and close relationships, they receive no mention within the human values or Big Five literatures; and so on. On the whole, then, the existing literature provides little consensus for understanding which person characteristics are seen as particularly important.

Empirical Versus Theoretical Derivation of Valued Traits

Atheoretical, empirical considerations drove much of the research generated by the reviewed approaches. For example, Anderson (1968) whittled a lengthy list of dictionary-derived person characteristics down to the 555 adjectives rated for likability; Rokeach (1973) used his own insights to trim Anderson's list to 18 instrumental values; and Big Five researchers similarly distilled lengthy lists of dictionary-derived trait words down to a smaller set of factors using exploratory factor analyses. Although useful for these researchers' particular purposes, such empirically driven strategies are somewhat less useful for our current purposes and may have even contributed to the incompatibility in the traits emerging as important across the different literatures, as starting with imperfectly overlapping sets of characteristics can easily produce different final solutions. We suggest, in contrast, that a theory-focused approach might yield a somewhat different, and more coherent, understanding of what person characteristics are especially important.

Presumption of One Ideal

By often inquiring only about an ideal generic other, the extant perspectives imply that a single ideal configuration of person attributes will suit all types of social interaction partners. These approaches therefore fail to offer insight into the possibility that traits highly important for some types of target individuals may not be highly important for qualitatively different types of target individuals.[1] Below we put forth the notion that some person characteristics should indeed be differentially valued across different interdependent social contexts (see Buss, 1996, for a similar hypothesis). According to university students, for example, intimacy/warmth is more desirable for ideal friends than leaders, whereas academic success is more desirable for ideal leaders than friends (Lusk, MacDonald, & Newman, 1998; MacDonald, 1998). However, little in the way of empirical work has directly and systematically explored the idea that different characteristics will be viewed as differentially important for target individuals in different social relationships.

Importance Hierarchy

Implicit in our consideration of valued characteristics is the likelihood that importance hierarchies exist within a set of highly preferred characteristics—that some highly important characteristics are more important than others. Indeed, some of the reviewed empirical research (e.g., Anderson, 1968; Buss, 1989; Rokeach, 1973; Schwartz, 1992) suggests the presence of importance hierarchies. Yet, these approaches cannot differentiate between person characteristics that may be nearly essential to a social relationship (i.e., necessities) and those that may be highly valued but not essential (i.e., luxuries). Researchers typically ask people to provide simple ratings for lengthy lists of person attributes (e.g., Anderson's, 1968, research; close relationships research). Because participants can rate all characteristics as extremely important, this task may obscure those characteristics thought by the raters to be especially essential. A similar concern was recently raised within the arena of mate selection, stimulating the development of novel methodological tools to distinguish necessities from luxuries (Li, Bailey, Kenrick, & Linsenmeier, 2002).

In summary, not one of the extant approaches offers a conceptually coherent picture that addresses the kinds of questions we posed at the outset. To be fair, that research was designed for other purposes—to obtain general favorability ratings for impression formation experiments (e.g., Anderson, 1968), to explore the factors distinguishing friends from nonfriends (e.g., Byrne, 1971), to discover the ideals guiding people's lives (Rokeach, 1973; Schwartz, 1992), and so forth. Our goal here is to generate theoretically derived predictions about the importance people place on different person characteristics across a range of assorted social contexts. Toward this end, we begin by introducing the sociofunctional perspective, a theoretical approach that has recently proved useful for generating novel hypotheses about other aspects of human sociality, including stigma and prejudice (Cottrell & Neuberg, 2005; Neuberg & Cottrell, 2002; Neuberg, Smith, & Asher, 2000).

A Sociofunctional Analysis

By their nature, humans are social creatures. Humans—more so than other mammals—tend to form coordinated social units, working together toward common valued goals. This "obligatory interdependence" (Brewer, 2001) or "ultrasociality" (Campbell, 1982; Richerson & Boyd, 1998) requires individuals to be both willing and able to share resources—and, more broadly, to engage in repeated interdependent interactions—with other group members (Kurzban & Neuberg, 2005).

In this mutually interdependent arrangement, individuals' outcomes are intertwined with those of fellow group members and the group as a whole. Social living clearly offers the individual many important benefits, including access to essential resources (e.g., food, shelter, mates) and progress toward essential goals (e.g., self-protection, status seeking). As a result, people invest great time, energy, and resources in their groups and relationships. Group life has its costs, however (e.g., Alexander, 1974; Dunbar, 1988). For example, social living surrounds one with individuals able to do one physical harm, contaminate one with contagious diseases, abscond with one's resources, and the like. If threats such as these—which endanger the individual's social investment as well as other resources—are not managed, the costs of sociality will quickly exceed its advantages. Individuals can protect their investments in groups and relationships by effectively identifying and responding to others' features or behaviors that characterize them as potential facilitators or hindrances to social success (Cot-

[1] To his credit, Anderson (1968) reminded the reader that his normative ratings were useful only for "generalized others," cautioning that "in other contexts, the values of the words would be different" (p. 279).

trell & Neuberg, 2005; Neuberg & Cottrell, 2002; Neuberg et al., 2000).

We therefore should expect humans to demonstrate discriminate sociality (Kurzban & Leary, 2001; Kurzban & Neuberg, 2005). That is, people should select their interaction partners with care, seeking out others likely to promote beneficial interdependent interactions and group effectiveness and avoiding those likely to impede beneficial interdependent interactions and group effectiveness.

Trustworthiness and Cooperativeness

Fundamentally, humans' unique brand of sociality requires cooperation: It requires individuals to contribute to shared goals, usually via the application of skills or the provision of material or informational resources. Such contributions are often costly, however, which may incline individuals to free ride on the contributions of others and thereby gain the benefits of cooperation without assuming its burdens (Kerr, 1983; Kerr & Bruun, 1983; Latané, Williams, & Harkins, 1979). Some interdependent interactions occur face to face and in concert, with essentially simultaneous exchanges of efforts and/or resources; such forms of cooperation are easy to monitor and enforce, thus increasing the likelihood that one's exchange partner will provide his or her fair share of effort or resources. However, most exchanges are nonsynchronized—I help you today, and you'll (hopefully) help me next week—thus making them harder to monitor and enforce. Such forms of cooperation therefore require a trust that one's exchange partners will live up to their parts of the arrangement. One might reasonably argue, then, that cooperation and trust form the foundation of human sociality (Brewer, 1997). In light of this, people are likely to view the traits of trustworthiness and cooperativeness as extremely important qualities to seek in others for an interdependent relationship that will promote acquisition of valuable resources and progress toward valuable goals.

Trustworthiness, in particular, should be of paramount importance. As Brewer (1999) noted, an individual should only cooperate right now if there is a high probability that others will cooperate in the future; that is, truly effective cooperation requires that others be viewed as trustworthy—that they can be expected to share future resources when they have previously agreed to do so. To the extent that trust is a necessary condition for effective cooperative exchange (e.g., Deutsch, 1960), then, we might reasonably expect that people will view others' traits indicating trustworthiness to be even more important than traits indicating cooperativeness within an interdependent relationship.

Moreover, traits related to trustworthiness should be important for all types of interdependent relationships, regardless of the particular goal or task they are meant to accomplish. People come together in pairs and groups to accomplish many different goals—to exchange social support with a friend, raise a family with a spouse, join with others to defeat an opposing football team, and so on. Each of these goals, however, requires each interdependent partner or group member to have confidence that others will make good faith contributions, typically over a period of time, to benefit the collective well-being of the relationship or group. People should thus strongly desire trustworthiness across qualitatively different interdependence contexts. People should also value cooperativeness across different interdependence contexts, though less so than trustworthiness. Note that this theoretical analysis does not suggest that trustworthiness and cooperativeness will always be the most important characteristics for a given group or relationship. Rather, we suggest that trustworthiness and cooperativeness—unlike other characteristics—should be highly valued across qualitatively different interdependent groups and relationships.

Other Valued Traits

Other person characteristics should also be highly valued. Because they will be less related to the core nature of sociality, however, they should vary greatly in their perceived importance as a function of their relevance to the precise goals or tasks of the interdependence context. Different groups and relationships require their members to complete different tasks in order to achieve success at a particular goal. If a particular characteristic is specifically relevant to a given task—and will thus facilitate the success of the group or relationship—then it should be especially important to find others who possess that attribute to join the group or relationship. For instance, individual differences in intellectual ability will have important implications for the success of a university study group (which requires members to complete intellectual tasks), whereas individual differences in athletic ability will not. Consequently, intelligence (more than athletic ability) is likely to be a highly valued characteristic in potential study group members. In contrast, individual differences in athletic ability will have important implications for the success of a pick-up basketball team formed in a university gymnasium (which requires members to complete athletic tasks), whereas individual differences in intellectual ability will not. Thus, athleticism (more than intelligence) is likely to be a highly valued characteristic in the gym. The value of person characteristics such as these, then, should differ greatly as a function of the particular tasks or goals served by a potential group member or relationship partner.

Which specific characteristics are valued within each group or relationship can often be predicted from formal task and problem analyses, such as those performed by researchers and practitioners within industrial–organizational psychology interested in job and group performance (e.g., Driskell, Hogan, & Salas, 1987; Holland, 1985; Steiner, 1972), by evolutionary psychologists interested in personality and social interaction (e.g., Buss, 1996; Lusk et al., 1998), and by social psychologists interested in affiliation tendencies during stressful situations (e.g., Rofe, 1984). Because different groups and relationships involve different tasks and require different behaviors from individuals, the personality characteristics associated with the specific task should be especially important for a given social group or relationship (Driskell et al., 1987). This context-specific perspective on trait importance is consistent with other functional approaches to person perception (e.g., Gill & Swann, 2004; McArthur & Baron, 1983; Swann, 1984), which also suggest that different traits may be highly relevant to different social contexts.

Hypotheses and Overview

From theoretically grounded assumptions about the fundamental features of human sociality, we have derived predictions about the traits people should value in others and the circumstances in which

these traits should be especially valued. We hypothesized that (a) people highly value trustworthiness (in particular) and cooperativeness (to a lesser extent) in others with whom they may be socially interdependent, (b) they do so regardless of the particular task or functions these others may serve for them, and (c) they differentially value other characteristics in others depending on the relevance of these characteristics to the specific tasks or problems faced.

We tested these hypotheses in three studies. In each, participants evaluated the importance of assorted characteristics for ideal members of multiple groups and relationships. In Study 1, we examined the characteristics highly valued for a generic ideal person. Because of its focus on a nonspecified other, Study 1 serves as a backdrop for the subsequent studies, which illustrate the costs of failing to account for the specific interdependence context. Study 2 moved beyond extant research by considering whether individuals highly value some characteristics—trustworthiness, cooperativeness—across different group members and relationship partners (e.g., close friend, employee, athletic team member, work group member) but differentially value other characteristics (e.g., extraversion, intelligence) depending on the group tasks and relationship functions. Finally, in Study 3, we forced participants to trade off the importance of different characteristics against one another, thereby enabling us to differentiate among those valued characteristics viewed as necessities and those viewed as luxuries. By gathering ideal trait configurations for a variety of target individuals (Studies 2 and 3) and using innovative experimental methods (Study 3; Li et al., 2002), we present novel data that address limitations of previous research and speak to the theoretical questions posed above.

Study 1

In this study, we asked people to evaluate the importance of assorted characteristics for a generic ideal person, thereby serving two useful purposes: (a) The focus on an ideal person connects the present empirical investigations to previous research, and (b) it highlights—via comparison with the subsequent studies—the theoretical limitations of inquiring about valued traits for only a nonspecific other. Study 1 therefore addresses only our first prediction—that people highly value trustworthiness and cooperativeness.

Method

Participants

A total of 48 undergraduate students (15 men, 33 women) participated in exchange for extra credit in an upper-division psychology course. They were, on average, 21.34 years old (SD = 3.73).

Materials and Procedure

The questionnaire instructed the participants to contemplate the characteristics they would use to "create an ideal person." Participants rated the importance of 31 positive characteristics for this ideal individual and then indicated the 1 characteristic that was most necessary for this person to possess.

To assess the value placed on different personal attributes, participants reported on 9-point Likert scales the extent to which each characteristic is important for an ideal individual (1 = *not at all important*; 9 = *extremely important*). Because we desired information about a broad range of person constructs, we included a list of 31 characteristics selected for their relevance to the sociofunctional approach, the five-factor model of personality, and other contemporary perspectives on valued traits; these adjectives and phrases were either identical or very similar to those used in previous research on person characteristics (e.g., Costa & McCrae, 1992; Costa et al., 1991; Goldberg, 1992; John & Srivastava, 1999; Saucier, 1994, 2002). These specific attributes were assumed to represent 13 trait categories: trustworthiness (*trustworthy*, *honest*, *loyal*, *sincere*, *dependable*), cooperativeness (*cooperative*, *giving*, *sharing*, *fair and just*, *supportive*), agreeableness (*agreeable*, *kind*, *interpersonally warm*), extraversion (*outgoing*, *sociable*, *friendly*, *funny*), conscientiousness (*conscientious*, *organized*), emotional stability (*emotionally stable*, *calm*, *happy*), open-mindedness (*open-minded*, *creative*), intelligence (*intelligent*, *rational*), predictability (*predictable*), attractiveness (*physically attractive*), similarity (*similar to me*), physical health (*healthy*), and assertiveness (*assertive*). All participants considered these characteristics in the same random order.[2] Finally, participants were asked to select the one characteristic they believed to be most necessary for an ideal person.

Results and Discussion

Likert Ratings of Importance

Guided by our a priori categorization, we examined the average interitem correlations among the importance ratings presumed to comprise each trait category; Cronbach's alpha is an inappropriate indicator of reliability given the different number of items representing the different trait categories and the known bias in alpha as a function of number of items. Reliability was adequate: Despite some variation, interitem correlations averaged .40 for the trait categories containing multiple items.[3] As such, we averaged items to create composite importance scores for the 13 trait categories; the correlations among these traits are shown in Table 1.

Table 2 presents mean importance ratings for each trait. A one-way (trait) repeated measures analysis of variance (ANOVA) revealed a significant main effect, $F(12, 564) = 45.21$, $p < .0001$, $\eta^2 = .49$, indicating that participants did not rate the 13 traits as equally important. Our sociofunctional perspective suggests trustworthiness and cooperativeness ought to be especially important for a generic ideal person, which is presumably an aggregate of many interdependent group members and relationship partners. To test these specific predictions, we compared the importance rating of each of the predicted traits against the average importance rating of the nonpredicted traits. In addition to these planned contrasts, we also conducted exploratory contrasts to probe for characteristics

[2] We also included *conventional* as a reverse-scored indicator of the open-mindedness category. Because correlations among the measured items did not support this association, however, we feel unsure of participants' interpretation of this characteristic and have dropped it from subsequent analysis.

[3] We note, as a reference point, that a three-item scale with an average interitem correlation of .44 creates an alpha of .70.

Table 1
Correlations Among Trait Categories for Ideal Person (Study 1)

Trait category	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Trustworthiness	—												
2. Cooperativeness	.66***	—											
3. Agreeableness	.55***	.62***	—										
4. Extraversion	.64***	.70***	.55***	—									
5. Conscientiousness	.43**	.60***	.42**	.43**	—								
6. Emotional stability	.52***	.55***	.48***	.58***	.56***	—							
7. Open-mindedness	.41**	.53***	.21	.43**	.32*	.23	—						
8. Intelligence	.45**	.36*	.38**	.36*	.57***	.50***	.08	—					
9. Assertiveness	.14	.05	.17	.18	.24	.12	−.04	.31*	—				
10. Attractiveness	.44**	.34*	.21	.46**	.42**	.39**	.17	.38**	.24	—			
11. Physical health	.65***	.39**	.30*	.43**	.54***	.63***	.19	.61***	.21	.53***	—		
12. Similarity	.05	.28	.44**	.26	.23	.02	.16	.09	.10	.12	.04	—	
13. Predictability	.19	.35*	.39**	.14	.50***	.14	.08	.28	.00	.21	.20	.49***	—

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

rated as especially important though not predicted to be so. Specifically, we compared the importance rating of each nonpredicted trait against the average importance rating of the other nonpredicted traits (using a Bonferroni-adjusted alpha of .005). Note that here and in subsequent studies, we report only the contrasts indicating that a particular trait is significantly more (but not less) important than the average of other traits (degrees of freedom values for all contrasts were 1 and 47).[4]

Both trustworthiness and cooperativeness were indeed viewed as more important than the nonpredicted traits for a generic ideal person ($F = 331.26$, $p < .0001$, partial $\eta^2 = .86$, and $F = 69.98$, $p < .0001$, partial $\eta^2 = .60$, respectively). Consistent with our theoretical claims about their relative importance, a pairwise comparison revealed that trustworthiness was rated as significantly more important than cooperativeness ($p < .0001$). In addition, participants valued agreeableness ($F = 71.65$, $p < .0001$, partial $\eta^2 = .60$), extraversion ($F = 36.55$, $p < .0001$, partial $\eta^2 = .44$), emotional stability ($F = 31.56$, $p < .0001$, partial $\eta^2 = .40$), intelligence ($F = 26.54$, $p < .0001$, partial $\eta^2 = .36$), and physical health ($F = 44.12$, $p < .0001$, partial $\eta^2 = .48$) more than the other nonpredicted characteristics. Although these characteristics were each significantly less important than trustworthiness (all pairwise ps $< .001$), none were significantly less important than cooperativeness (all pairwise ps $> .08$).

Table 2
Importance of Trait Categories for Ideal Person (Study 1)

Trait category	Mean Likert-scale importance ratings	Most necessary nominations (%)	
		Chance level	Observed frequency
Trustworthiness	**8.15***	16.1	**65.9**
Cooperativeness	**7.26***	16.1	4.5
Agreeableness	**7.26**	9.7	4.5
Extraversion	**7.05**	12.9	2.3
Conscientiousness	5.95	6.5	2.3
Emotional stability	**7.05**	9.7	13.6
Open-mindedness	6.84	6.5	2.3
Intelligence	**7.00**	6.5	4.5
Assertiveness	5.67	3.2	0
Attractiveness	6.50	3.2	0
Physical health	**7.48**	3.2	0
Similarity	5.19	3.2	0
Predictability	3.90	3.2	0

Note. Mean Likert-scale importance ratings presented in boldface emerged in either planned or exploratory contrasts as significantly more important than other traits; means marked with asterisks were predicted to be especially important. Entries in the chance level column represent the frequency with which each trait category is expected to be selected as the most necessary by chance alone, on the basis of the number of traits in each category. Observed most necessary frequencies presented in boldface are significantly greater than the chance frequency ($p < .05$).

Nominations of the Most Necessary Characteristic

Participants' nominations of the most necessary trait for an ideal person offer another glimpse at the importance people assign to different characteristics. On the basis of our a priori categorization, we aggregated nominations across the 31 individual traits to create total nominations for each of the 13 trait categories for an ideal person. Table 2 presents the frequency with which each trait category was selected as the most important. If all characteristics were equally important, we should expect participants to select each trait category at a frequency consistent with the number of individual items contained within each category; these frequencies are presented in the chance level column of Table 2. To the extent some observed frequencies deviate from chance frequencies, the characteristics differ in importance. According to binomial tests comparing observed frequencies to expected frequencies, only trustworthiness was selected as most necessary at a frequency

[4] In exploratory fashion, we examined gender differences in importance ratings for the assorted traits in Study 1, as well as in the subsequent two studies. Although small gender effects emerged for some traits and for some targets within each study, we do not present them here for two reasons: (a) These minor effects did not appear to drive any of our focal findings presented in this article, and (b) we were often unable to discern any reliable and interpretable patterns within each study or across the three studies. Instead, our empirical focus for each study remains on the importance of different person characteristics within different social interdependencies, regardless of participant gender.

exceeding chance for an ideal person (65.9%; $p < .0001$), a finding consistent with our hypotheses.

Study 2

As Study 1 suggests, trustworthiness and, to a lesser extent, cooperativeness appear to be very important when contemplating generic others. Study 2 was designed to test the hypotheses that trustworthiness and cooperativeness should also be highly valued across all interdependent social contexts, whereas other characteristics should be differentially valued across specific social contexts. To this end, we asked Study 2 participants to consider the importance of various characteristics for ideal members of interdependent groups (e.g., golf team, fraternity) and dyadic relationships (e.g., close friend, employee).

In Study 2, we also expanded our scope to include favorable characteristics beyond those examined in Study 1. First, a sociofunctional perspective might suggest the importance of trustingness across a wide range of social contexts. To the extent trust forms the foundation for human sociality (Brewer, 1997), perhaps people desire interaction partners who are both trustworthy and trusting, as each characteristic ought to facilitate efficient social coordination and cooperation. Trustingness, in particular, indicates that an individual will accept as true others' commitments and promises—an attribute that can save others the costs of repeatedly signaling their commitment. Although we expect trustworthiness to be more important than trustingness, it seems reasonable to expect trustingness to also be important for interdependent groups and relationships. In addition, extant research highlights other characteristics that one could expect to be very important. For instance, Schwartz and Bardi (2001) demonstrated that many people around the world place great importance on values related to benevolence (i.e., "preservation and enhancement of the welfare of people with whom one is in frequent personal contact," p. 270) and universalism (i.e., "understanding, appreciation, tolerance, and protection for the welfare of all people and for nature," p. 270). Perhaps, then, individuals value benevolence-related traits (e.g., compassion, nurturance) and universalism-related traits (e.g., tolerance, respectfulness) in others with whom they are interdependent. Much research has also demonstrated the importance of resource potential in others, especially romantic partners (e.g., Fletcher et al., 1999, 2000); perhaps individuals value wealth, social status, and ambition in others with whom they are interdependent. In all, Study 2 was designed to explore the importance of these characteristics (and others also unexplored in Study 1) across a range of interdependence contexts.

Study 2 serves another important purpose related to the trustworthiness and cooperativeness constructs. In the introduction, we outlined a theoretical rationale for the importance of trustworthiness and cooperativeness to human interdependence. It may be, however, that a finer-grain consideration of these characteristics is useful here. That is, there likely exist different "flavors" of both trustworthiness and cooperativeness, which may be differentially important for different social groups and relationships. In Study 1, we assessed the importance of these characteristics using specific items that captured different facets, though not systematically. Here, we consider more textured forms of trustworthiness and cooperativeness in an admittedly preliminary manner. From our perspective, the core of trustworthiness involves confidence that an individual will follow through with previous commitments in the future. This may involve many specific characteristics and behaviors, including honesty ("I expect you to truthfully represent yourself and your knowledge"), dependability ("I expect you to behave in a consistent manner so as to facilitate our collective goals"), and loyalty ("I expect you to place our relationship above other comparable relationships").

Along similar lines, the core of cooperativeness involves an individual's willingness to contribute valuable resources to another person. Just as with trustworthiness, there may be different forms of cooperativeness. In a productive program of research, Clark and her colleagues (e.g., Clark & Mills, 1979; Mills & Clark, 1982) explored the features of two different types of relationships—communal and exchange relationships—which are characterized by different norms for the provision of resources between partners. Following this distinction, we suggest that individuals may be attuned to two kinds of cooperativeness: a communal orientation (i.e., a tendency for others to give resources and benefits when they are needed by another) and an exchange orientation (i.e., a tendency to give resources and benefits to another in response to resources and benefits either received in the past or anticipated in the future).

In Study 2, we moved beyond the general measures of trustworthiness and cooperativeness in Study 1 to assess the importance of trustworthiness (on the whole) and cooperativeness (on the whole) as well as the importance of specific trust-related characteristics—honesty, dependability, and loyalty—and specific cooperativeness-related characteristics—communal orientation and exchange orientation.[5] Although we anticipated that these specific forms of trustworthiness and cooperativeness might be differentially important across interdependence contexts, we expected—as suggested by our theoretical analysis—that the more general constructs of trustworthiness and cooperativeness would nonetheless be highly valued across interdependent social groups and relationships.

In summary, Study 2 (a) examined the importance of a wide range of characteristics across qualitatively different social contexts, (b) examined the importance of characteristics beyond those included in Study 1 (e.g., compassion, nurturance, wealth, social status), and (c) explored in a systematic way the importance of specific components of trustworthiness and cooperativeness for assorted interdependence contexts.

Method

Participants

A total of 92 undergraduate students (54 men, 38 women) participated. They were, on average, 19.76 years old ($SD = 1.74$). All participants were recruited from the introductory psychology participant pool and received required course credit in exchange for their participation.

[5] Although we do not contend that this is an exhaustive list, we do believe that these specific forms capture a broad range of trust-related and cooperation-related facets for this preliminary investigation.

Materials and Procedure

For each target individual, participants contemplated the characteristics they would use to create an ideal member of the group or relationship. The particular group members and relationship partners were included both because they represent qualitatively different tasks and goals and because they are meaningful and familiar to our college student sample. Participants rated the importance of 75 positive characteristics for each ideal individual and then indicated the 1 characteristic that was most necessary for that ideal person to possess.

Measures of trait importance. Study 2 measures of trait importance were very similar to those used in Study 1 with the following modifications: (a) A broader range of person characteristics were included, (b) specific components of trustworthiness and cooperativeness were systematically assessed, and (c) characteristics synonymous with those previously measured were included to provide better assessments of trait categories measured with relatively few items in Study 1. As in the previous study, participants first reported on 9-point Likert scales the extent to which each of 75 characteristics is important for a particular ideal individual (1 = *not at all important*; 9 = *extremely important*). We supplemented those 31 traits assessed in the first study with additional items that serve the goals of this study. In all, these 75 specific characteristics were assumed to represent 22 trait categories capturing a wide range of person constructs: trustworthiness (*trustworthy, honest, sincere, genuine, truthful, dependable, reliable, loyal, committed, dedicated, devoted, faithful*), cooperativeness (*cooperative*, *giving*, *sharing*, *supportive, generous, unselfish, fair and just, equitable, reciprocity-minded, fair-minded*), trustingness (*trusting*, *open*), agreeableness (*agreeable*, *kind*, *interpersonally warm*), extraversion (*outgoing*, *sociable*, *friendly*), conscientiousness (*conscientious*, *organized, orderly*), emotional stability (*emotionally stable*, *calm*, *happy, even-tempered*), open-mindedness (*open-minded*, *creative, broad-minded*), intelligence (*intelligent*, *rational, smart*), predictability (*predictable, consistent*), attractiveness (*physically attractive, good-looking*), similarity (*similar to me, like-minded*), physical health (*healthy, physically fit, energetic*), assertiveness (*assertive, bold, confident*), humor (*funny*, *humorous*), compassion (*considerate*, *compassionate*, *understanding*), tolerance (*tolerant*, *accepting*, *forgiving*), respectfulness (*respectful*, *polite*, *courteous*), nurturance (*nurturing*, *caring*), high status (*successful*, *highly-respected*), ambition (*ambitious, aspiring, motivated*), and wealth (*financially secure*, *financially prosperous*). All participants considered these person characteristics in the same random order. After completing the Likert-scale ratings, participants were asked to select the 1 characteristic they believed to be most necessary for that particular ideal individual.

Target individuals. Participants imagined creating ideal members of seven different groups and relationships in one of seven random orders. These targets—work project team member, final exam study group member, golf team member, sorority member, fraternity member, close friend, and employee—all involve interdependent interactions and were selected to capture a wide range of tasks and goals.[6]

We expected trustworthiness, in particular, as well as cooperativeness, to emerge as highly important across these groups and relationships. In addition, we hypothesized that a newly added trait—trustingness—would be considered very important across these seven target individuals.

We expected, however, that the importance of other characteristics would vary with the tasks and goals of each interdependence context. By classifying the primary tasks of each group or relationship, we can specify the characteristics predicted to be most important for that social context (i.e., those characteristics most likely to facilitate task success). Below we outline such domain-specific predictions, relying heavily on research and theory outlining the typical tasks of various groups and relationships (e.g., Driskell et al., 1987; Johnson et al., 2006; Wittenbaum et al., 2004). In cases for which previous research does not explicitly generate domain-specific predictions, we use our own task analysis to derive explicit predictions, focusing on those attributes likely to be especially important for each group member and relationship partner.

Project teams and final exam study groups involve a combination of intellectual and logical tasks in which individuals must generate and then integrate information (Driskell et al., 1987), which should enhance the importance of intelligence, openness to experience, and conscientiousness for members of these two groups. The primary function of golf teams is to succeed in athletic competitions, which is presumably facilitated by physical health. As such, we expected physical health to be seen as quite important for members of golf teams. Close friendships, sororities, and fraternities are all intimacy groups (e.g., Lickel et al., 2000), which fulfill primarily affiliation-related needs for their members (e.g., Havercamp & Reiss, 2003; Johnson et al., 2006; Wittenbaum et al., 2004). As such, we expected that extraversion and agreeableness would be especially important for close friends and for members of sororities and fraternities, as extraversion should create affiliation opportunities and agreeableness should aid in the smooth, coordinated running of such interactions. In addition, we assumed that sororities help college women attract male suitors (e.g., Whitbeck & Hoyt, 1991), which should enhance the value of physical attractiveness for ideal sorority members. The prototypic employee probably must perform logical tasks (Driskell et al., 1987), which should enhance the importance of intelligence and conscientiousness. Moreover, because employees often must defer to work supervisors, we expected that respectfulness would also be seen as very important.

Results

Data Analytic Strategy

We followed a similar data analytic strategy for Study 2 as for Study 1. Reliability was again adequate: Interitem correlations averaged .46 for the a priori trait categories across target individuals. We, thus, averaged the 75 Likert-scale importance ratings to

[6] In the context of another study, we asked 68 college students to evaluate the interdependence (defined as the extent to which all members are needed to reach group or relationship goals) among the members of different groups and relationships on a 7-point scale (Cottrell & Neuberg, 2006a). We included seven of these social contexts in Study 2: project team at work ($M = 5.94$), final exam study group ($M = 4.71$), golf team ($M = 4.43$), sorority ($M = 4.24$), fraternity ($M = 4.18$), close friendship ($M = 5.18$), and employees ($M = 4.56$).

Table 3
Mean Importance Ratings of Trait Categories Across Ideal Target Individuals (Study 2)

Trait category	Project team	Study group	Golf team	Sorority	Fraternity	Close friend	Employee
Trustworthiness	**7.35***	**6.87***	**6.74***	**7.45***	**7.33***	**7.68***	**7.73***
Cooperativeness	**6.39***	**5.93***	**5.70***	**6.51***	**6.29***	**6.79***	**6.25***
Trustingness	**7.07***	**6.32***	**5.83***	**7.30***	**6.90***	**7.74***	**6.88***
Agreeableness	**6.36**	**5.65**	5.38	**6.99***	**6.50***	**7.14***	**6.76**
Extraversion	**6.60**	**5.60**	**6.00**	**7.73***	**7.53***	**7.57***	**6.85**
Conscientiousness	**6.96***	**6.66***	5.43	5.76	5.38	5.33	**7.06***
Emotional stability	**6.10**	**5.73**	**6.31**	**6.51**	**6.37**	**6.80**	**6.81**
Open-mindedness	**7.42***	**6.31***	4.83	**6.49**	6.30	**6.69**	**6.75**
Intelligence	**7.67***	**7.74***	5.52	6.04	5.97	6.51	**7.39***
Assertiveness	**6.54**	**6.05**	**5.99**	6.16	**6.43**	6.18	**6.75**
Attractiveness	2.84	2.68	3.17	6.36*	5.24	4.73	3.74
Physical health	4.97	4.11	**7.13***	6.53	6.30	6.17	6.00
Similarity	4.27	3.71	3.86	5.11	5.39	6.40	4.66
Predictability	**6.30**	**6.03**	**6.48**	5.78	5.40	5.65	**6.84**
Compassion	**6.29**	**5.54**	5.44	**6.83**	6.37	**7.37**	**6.39**
Nurturance	4.93	4.42	4.55	6.35	5.61	6.43	5.44
Tolerance	**6.19**	**5.54**	5.59	**6.82**	**6.60**	**7.37**	6.29
Respectfulness	**6.62**	**6.15**	**6.21**	**6.99**	**6.57**	**6.96**	**7.53***
Humor	5.17	4.48	5.02	6.61	**6.92**	**7.53**	5.49
High status	5.69	**5.63**	5.28	5.54	5.74	5.42	6.15
Wealth	3.43	2.17	3.70	4.82	4.92	3.94	4.45
Ambition	**7.43**	**7.30**	**7.25**	6.32	**6.62**	**6.54**	**7.63**

Note. Means presented in boldface emerged in either planned or exploratory contrasts as significantly more important than other traits for a given target individual; means marked with asterisks were predicted to be especially important for a given target individual.

create composite scores of the importance assigned to each of 22 trait categories for each of the seven target individuals (see Table 3). A two-way (Trait × Target Individual) repeated measures ANOVA revealed a significant interaction, $F(126, 11466) = 30.69$, $p < .0001$, $\eta^2 = .25$, indicating that participants reported different patterns of trait importance across target individuals. To test our specific predictions for each target individual, we next compared the importance rating of each trait predicted to be important against the average importance rating of the traits not predicted to be important for a given target group or target relationship. We also conducted exploratory contrasts on the trait importance ratings, comparing each nonpredicted trait versus the average of the other nonpredicted traits for a given target individual (using a Bonferroni-adjusted alpha of .003).

The most necessary nominations for each target individual offer additional tests of our hypotheses, though they alone cannot highlight all the characteristics important for a given social context as they force participants to select just 1 trait. We again aggregated nominations across the 75 individual traits to create total nominations for each of the 22 trait categories for each target individual (see Table 4). We tested our hypotheses via a series of binomial tests conducted within each target individual. Specifically, we compared the observed frequency for each trait against the expected (i.e., chance level) frequency for that trait.

Planned and Exploratory Analyses: All 22 Trait Categories

Project team member. Consistent with predictions, participants rated trustworthiness ($F = 377.03$, $p < .0001$, partial $\eta^2 = .81$),[7] cooperativeness ($F = 106.13$, $p < .0001$, partial $\eta^2 = .54$), trustingness ($F = 119.35$, $p < .0001$, partial $\eta^2 = .57$), intelligence ($F = 329.66$, $p < .0001$, partial $\eta^2 = .78$), open-mindedness ($F = 176.76$, $p < .0001$, partial $\eta^2 = .66$), and conscientiousness ($F = 97.02$, $p < .0001$, partial $\eta^2 = .52$) as more important than the nonpredicted traits for an ideal project team member. Of these, only trustworthiness (51.5%; $p < .0001$) and open-mindedness (11.8%; $p = .001$) were selected as most necessary at rates beyond chance.

In exploratory analyses, agreeableness ($F = 58.68$, $p < .0001$, partial $\eta^2 = .39$), extraversion ($F = 97.94$, $p < .0001$, partial $\eta^2 = .52$), emotional stability ($F = 27.96$, $p < .0001$, partial $\eta^2 = .24$), assertiveness ($F = 65.95$, $p < .0001$, partial $\eta^2 = .42$), predictability ($F = 27.51$, $p < .0001$, partial $\eta^2 = .23$), compassion ($F = 49.01$, $p < .0001$, partial $\eta^2 = .35$), tolerance ($F = 30.51$, $p < .0001$, partial $\eta^2 = .25$), respectfulness ($F = 106.27$, $p < .0001$, partial $\eta^2 = .54$), and ambition ($F = 213.99$, $p < .0001$, partial $\eta^2 = .70$) emerged as more important than other nonpredicted characteristics. Note, however, that none of these were chosen as most necessary at levels beyond chance.

Study group member. As predicted, participants rated trustworthiness ($F = 427.87$, $p < .0001$, partial $\eta^2 = .82$), cooperativeness ($F = 98.40$, $p < .0001$, partial $\eta^2 = .52$), trustingness ($F = 83.42$, $p < .0001$, partial $\eta^2 = .48$), intelligence ($F = 427.10$, $p < .0001$, partial $\eta^2 = .82$), open-mindedness ($F = 95.54$, $p < .0001$, partial $\eta^2 = .51$), and conscientiousness ($F = 163.03$, $p < .0001$, partial $\eta^2 = .64$) as more important than the nonpredicted traits. Of these, both trustworthiness (30.9%; $p < .001$) and intel-

[7] Degrees of freedom values for all contrasts in this section are 1 and 91.

Table 4
Frequencies of Selection of Each Trait Category as Most Necessary Across Ideal Target Individuals (Study 2)

Trait category	Chance level	Project team	Study group	Golf team	Sorority	Fraternity	Close friend	Employee
Trustworthiness	16.0	**51.5**	**30.9**	**41.4**	**29.6**	**37.5**	**53.6**	**65.3**
Cooperativeness	13.3	16.2	4.4	5.7	2.8	4.2	11.6	2.8
Trustingness	2.7	1.5	0	0	2.8	1.4	4.3	1.4
Agreeableness	4.0	0	0	0	1.4	1.4	0	0
Extraversion	4.0	0	0	1.4	**26.8**	**25.0**	**8.7**	0
Conscientiousness	4.0	4.4	0	0	0	0	0	0
Emotional stability	5.3	0	1.5	7.1	1.4	2.8	0	0
Open-mindedness	4.0	**11.8**	2.9	0	5.6	2.8	4.3	1.4
Intelligence	4.0	5.9	**50.0**	0	0	0	0	4.2
Assertiveness	4.0	1.5	0	2.9	1.4	0	1.4	2.8
Attractiveness	2.7	0	0	0	**15.5**	1.4	0	0
Physical health	4.0	0	0	**8.6**	1.4	5.6	0	0
Similarity	2.7	0	0	0	5.6	5.6	**11.6**	0
Predictability	2.7	0	0	**18.6**	1.4	1.4	0	4.2
Compassion	4.0	0	0	0	1.4	0	1.4	0
Nurturance	2.7	0	0	0	0	0	0	0
Tolerance	4.0	0	0	0	1.4	1.4	2.9	0
Respectfulness	4.0	0	0	1.4	1.4	1.4	0	2.8
Humor	2.7	0	0	2.9	0	4.2	0	0
High status	2.7	1.5	1.5	1.4	0	1.4	0	1.4
Wealth	2.7	0	0	0	0	0	0	0
Ambition	4.0	5.9	**8.8**	**8.6**	0	2.8	0	**13.9**

Note. All entries are percentage values. Entries in the chance level column represent the frequency with which each trait category is expected to be selected as the most necessary by chance alone, on the basis of the number of traits in each category. All other entries represent observed frequencies. Observed frequencies presented in boldface are significantly greater than the chance frequency ($p < .05$).

ligence (50.0%; $p < .0001$) were nominated as most necessary at rates beyond chance.

In exploratory analyses, agreeableness ($F = 31.34$, $p < .0001$, partial $\eta^2 = .26$), extraversion ($F = 20.14$, $p < .0001$, partial $\eta^2 = .18$), emotional stability ($F = 41.25$, $p < .0001$, partial $\eta^2 = .31$), assertiveness ($F = 68.36$, $p < .0001$, partial $\eta^2 = .43$), predictability ($F = 43.23$, $p < .0001$, partial $\eta^2 = .32$), compassion ($F = 20.62$, $p < .0001$, partial $\eta^2 = .18$), tolerance ($F = 20.64$, $p < .0001$, partial $\eta^2 = .18$), respectfulness ($F = 98.61$, $p < .0001$, partial $\eta^2 = .52$), high status ($F = 9.99$, $p = .002$, partial $\eta^2 = .10$), and ambition ($F = 296.52$, $p < .0001$, partial $\eta^2 = .77$) were rated as more important than the other nonpredicted traits. Of these, only ambition (8.8%; $p < .05$) was chosen as most necessary at a rate exceeding chance.

Golf team member. As hypothesized, trustworthiness ($F = 212.83$, $p < .0001$, partial $\eta^2 = .70$), cooperativeness ($F = 22.83$, $p < .0001$, partial $\eta^2 = .20$), trustingness ($F = 12.78$, $p = .001$, partial $\eta^2 = .12$), and physical health ($F = 134.71$, $p < .0001$, partial $\eta^2 = .60$) were rated as more important than the nonpredicted traits. Of these, trustworthiness (41.4%; $p < .0001$) and physical health (8.6%; $p < .05$) were selected as most necessary at rates beyond chance.

In exploratory analyses, extraversion ($F = 32.65$, $p < .0001$, partial $\eta^2 = .26$), emotional stability ($F = 80.40$, $p < .0001$, partial $\eta^2 = .47$), assertiveness ($F = 28.03$, $p < .0001$, partial $\eta^2 = .24$), predictability ($F = 42.26$, $p < .0001$, partial $\eta^2 = .32$), respectfulness ($F = 54.66$, $p < .0001$, partial $\eta^2 = .38$), and ambition ($F = 162.42$, $p < .0001$, partial $\eta^2 = .64$) emerged as more important than the other nonpredicted characteristics. Of these, both ambition (8.6%; $p < .05$) and predictability (18.6%; $p < .0001$) were nominated as most necessary at rates greater than chance.

Sorority member. As predicted, participants contemplating an ideal sorority member rated trustworthiness ($F = 193.45$, $p < .0001$, partial $\eta^2 = .68$), cooperativeness ($F = 26.72$, $p < .0001$, partial $\eta^2 = .23$), trustingness ($F = 108.36$, $p < .0001$, partial $\eta^2 = .54$), agreeableness ($F = 51.65$, $p < .0001$, partial $\eta^2 = .36$), and extraversion ($F = 208.79$, $p < .0001$, partial $\eta^2 = .70$) as more important than nonpredicted traits. Of these, trustworthiness (29.6%; $p < .01$) and extraversion (26.8%; $p < .0001$) were chosen as most necessary at rates beyond chance. Although physical attractiveness was not rated as more important than nonpredicted traits, it was selected as most necessary at a rate beyond chance (15.5%; $p < .001$), as predicted.

In exploratory analyses, emotional stability ($F = 17.87$, $p < .0001$, partial $\eta^2 = .16$), open-mindedness ($F = 9.76$, $p = .002$, partial $\eta^2 = .10$), compassion ($F = 38.96$, $p < .0001$, partial $\eta^2 = .30$), tolerance ($F = 40.68$, $p < .0001$, partial $\eta^2 = .31$), and respectfulness ($F = 59.77$, $p < .0001$, partial $\eta^2 = .40$) emerged as more important than other nonpredicted characteristics, although none of these were selected as most important at beyond-chance rates.

Fraternity member. Consistent with predictions, participants rated trustworthiness ($F = 164.90$, $p < .0001$, partial $\eta^2 = .64$), cooperativeness ($F = 13.78$, $p < .001$, partial $\eta^2 = .13$), trustingness ($F = 45.88$, $p < .0001$, partial $\eta^2 = .34$), agreeableness ($F =$

20.50, $p < .0001$, partial $\eta^2 = .18$), and extraversion ($F = 182.28$, $p < .0001$, partial $\eta^2 = .67$) as more important than nonpredicted traits for an ideal fraternity member. Of these, trustworthiness (37.5%; $p < .0001$) and extraversion (25.0%; $p < .0001$) were chosen as most necessary at rates beyond chance.

In exploratory analyses, emotional stability ($F = 15.28$, $p < .001$, partial $\eta^2 = .14$), assertiveness ($F = 14.00$, $p < .001$, partial $\eta^2 = .13$), tolerance ($F = 25.25$, $p < .0001$, partial $\eta^2 = .22$), respectfulness ($F = 18.93$, $p < .0001$, partial $\eta^2 = .17$), humor ($F = 29.44$, $p < .0001$, partial $\eta^2 = .24$), and ambition ($F = 25.21$, $p < .0001$, partial $\eta^2 = .22$) emerged as more important than other nonpredicted characteristics, although none of these were seen by participants as most necessary at rates beyond chance.

Close friend. As predicted, trustworthiness ($F = 346.03$, $p < .0001$, partial $\eta^2 = .79$), cooperativeness ($F = 67.63$, $p < .0001$, partial $\eta^2 = .43$), trustingness ($F = 175.10$, $p < .0001$, partial $\eta^2 = .66$), agreeableness ($F = 78.50$, $p < .0001$, partial $\eta^2 = .46$), and extraversion ($F = 137.79$, $p < .0001$, partial $\eta^2 = .60$) were rated as more important than the nonpredicted traits. Of these, both trustworthiness (53.6%; $p < .0001$) and extraversion (8.7%; $p < .05$) were chosen as most necessary at rates beyond chance.

In exploratory analyses, emotional stability ($F = 46.10$, $p < .0001$, partial $\eta^2 = .34$), open-mindedness ($F = 15.92$, $p < .001$, partial $\eta^2 = .15$), compassion ($F = 166.77$, $p < .0001$, partial $\eta^2 = .65$), tolerance ($F = 164.77$, $p < .0001$, partial $\eta^2 = .64$), respectfulness ($F = 49.97$, $p < .0001$, partial $\eta^2 = .35$), humor ($F = 73.27$, $p < .0001$, partial $\eta^2 = .45$), and ambition ($F = 10.02$, $p = .002$, partial $\eta^2 = .10$) were evaluated as more important than the other nonpredicted characteristics, and similarity (11.6%; $p < .0001$) was chosen as most necessary at a frequency beyond chance.

Employee. Consistent with hypotheses, participants contemplating an ideal employee rated trustworthiness ($F = 422.14$, $p < .0001$, partial $\eta^2 = .82$), cooperativeness ($F = 6.19$, $p = .015$, partial $\eta^2 = .06$), trustingness ($F = 45.70$, $p < .0001$, partial $\eta^2 = .33$), intelligence ($F = 145.80$, $p < .0001$, partial $\eta^2 = .62$), conscientiousness ($F = 91.76$, $p < .0001$, partial $\eta^2 = .50$), and respectfulness ($F = 210.20$, $p < .0001$, partial $\eta^2 = .70$) as more important than nonpredicted traits. Of these, only trustworthiness (65.3%; $p < .0001$) was nominated as most necessary at a rate greater than chance.

In exploratory analyses, agreeableness ($F = 59.07$, $p < .0001$, partial $\eta^2 = .39$), extraversion ($F = 70.86$, $p < .0001$, partial $\eta^2 = .44$), emotional stability ($F = 105.24$, $p < .0001$, partial $\eta^2 = .54$), open-mindedness ($F = 44.73$, $p < .0001$, partial $\eta^2 = .33$), assertiveness ($F = 41.84$, $p < .0001$, partial $\eta^2 = .31$), predictability ($F = 38.80$, $p < .0001$, partial $\eta^2 = .30$), compassion ($F = 13.59$, $p < .001$, partial $\eta^2 = .13$), and ambition ($F = 188.41$, $p < .0001$, partial $\eta^2 = .67$) emerged as more important than the other nonpredicted characteristics. Of these, only ambition (13.9%; $p < .0001$) was chosen as most necessary at a rate beyond chance.

In summary, participants reported that trustworthiness, cooperativeness, and trustingness were indeed valued across qualitatively different interdependence contexts, as hypothesized. Also as predicted, across these different interdependencies, trustworthiness, in particular, was considered an extremely important characteristic—even more so than cooperativeness (all pairwise trustworthiness vs. cooperativeness *p*s $< .001$). Other task-relevant characteristics (e.g., intelligence, physical health) were also considered important, though often in domain-specific ways.

Exploratory Analyses: Components of Trustworthiness and Cooperativeness Categories

Above we suggested that different components of trustworthiness and cooperativeness may be particularly important for different interdependence contexts. Here we briefly explore this possibility.

We began by breaking down the trustworthiness composite into three specific components: honesty (*honest*, *sincere*, *genuine*, *truthful*; average interitem correlation = .43), dependability (*dependable*, *reliable*; average interitem correlation = .51), and loyalty (*loyal*, *committed*, *dedicated*, *devoted*, *faithful*; average interitem correlation = .40). Table 5 presents the mean Likert-scale importance ratings for these trustworthiness components across target individuals, as well as the frequency with which each component was nominated as most necessary.[8] A two-way (Trustworthiness Component × Target Individual) repeated measures ANOVA on the importance ratings revealed a significant interaction, $F(12, 1092) = 27.37$, $p < .0001$, $\eta^2 = .23$, indicating that participants reported different patterns of importance judgments for these three types of trustworthiness across target individuals.

We next conducted Tukey's honestly significant difference tests within each target individual to probe for pairwise mean differences among the trustworthiness components. Dependability was rated as more important than honesty and loyalty for work-focused target individuals—project team members, study group members, and employees—and for golf team members. For these four ideal individuals, loyalty was rated as significantly less important, followed by honesty. Different patterns emerged, however, for the three target individuals involving largely social goals and tasks. For an ideal sorority member, participants rated honesty, dependability, and loyalty as equally important. For an ideal fraternity member, dependability and loyalty were both evaluated as very important, whereas honesty was rated as significantly less important. When contemplating an ideal close friend, participants judged both honesty and dependability as extremely important, whereas loyalty was rated as significantly less important.

To probe the most necessary nominations, we also performed binomial tests for each target individual, comparing the observed frequency for each component against the chance frequency for that component (see Table 5). Dependability was again judged as very important: It was selected as most necessary at frequencies exceeding chance for five of the seven target individuals (project team member: 35.3%, $p < .001$; study group member: 22.1%, $p < .001$; golf team member: 8.6%, $p = .002$; close friend: 7.3%, $p = .02$; employee: 37.5%, $p < .001$). Loyalty was chosen as most necessary at rates beyond chance for a golf team member (27.1%, $p < .001$), sorority member (14.1%, $p = .01$), fraternity member (22.2%, $p < .001$), and employee (13.9%, $p = .01$). Honesty was selected as most necessary at a rate beyond chance only for an ideal close friend (13.0%, $p = .004$).

[8] Because it is assumed to be a general umbrella term, the *trustworthy* item is not included in any of the specific trustworthiness components. However, for comparison purposes, Table 5 presents the importance judgments for this item across target individuals.

Table 5
Importance of Trustworthiness Components Across Ideal Target Individuals (Study 2)

Trustworthiness component	Project team	Study group	Golf team	Sorority	Fraternity	Close friend	Employee	Chance level
				Mean Likert-scale importance ratings				
Honesty	6.81_a	6.31_a	5.86_a	7.27_a	6.98_a	7.96_a	7.34_a	
Dependability	8.35_b	8.23_b	7.84_b	7.55_a	7.61_b	7.85_a	8.42_b	
Loyalty	7.23_c	6.77_c	7.01_c	7.45_a	7.35_b	7.20_b	7.62_c	
Trustworthy (alone)	8.08	6.91	6.71	8.04	8.14	8.64	8.49	
				Frequency of most necessary nominations				
Honesty	2.9	2.9	2.9	5.6	8.3	**13.0**	5.6	5.3
Dependability	**35.3**	**22.1**	**8.6**	4.2	1.4	**7.3**	**37.5**	2.7
Loyalty	10.3	2.9	**27.1**	**14.1**	**22.2**	10.1	**13.9**	6.7
Trustworthy (alone)	2.9	2.9	2.9	**5.6**	**5.6**	**23.2**	**8.3**	1.3

Note. Mean Likert-scale importance ratings marked with different subscripts within each column are significantly different according to Tukey's honestly significant difference tests ($p < .05$). Observed most necessary frequencies presented in boldface are significantly greater than chance frequency ($p < .05$).

We followed a similar strategy to explore the cooperativeness composite. We first broke down the cooperativeness composite into two specific components: communal orientation (*giving*, *sharing*, *supportive*, *generous*, *unselfish*; average interitem correlation = .44) and exchange orientation (*fair and just*, *equitable*, *reciprocity-minded*, *fair-minded*; average interitem correlation = .35). The communal-focused items were selected to connote a general tendency to give to others without tab keeping, whereas the exchange-focused items were selected to imply such tab-keeping in one's contributions to others. Table 6 presents the mean Likert-scale importance ratings for these cooperativeness components across target individuals, as well as the frequency with which each component was nominated as most necessary.[9] A two-way (Cooperativeness Component × Target Individual) repeated measures ANOVA on the importance ratings revealed a significant interaction, $F(6, 546) = 16.41$, $p < .0001$, $\eta^2 = .15$, indicating that participants reported different patterns of importance judgments for these two types of cooperativeness across target individuals.

Using *t* tests to compare importance ratings of a communal orientation versus exchange orientation for each target individual, we found that participants considered a communal orientation more important for ideal sorority members and close friends, whereas they considered an exchange orientation more important for ideal project team members, golf team members, and employees (all *p*s $< .05$). Communal and exchange orientations were rated as equally important for ideal study group members and fraternity members. In addition, binomial tests on the most necessary nominations revealed that participants never selected one of these cooperativeness components as most necessary at a rate beyond chance.

Discussion

Overall, Study 2 offers strong support for our main hypotheses. Consistent with our sociofunctional approach, trustworthiness in particular emerged as very important across various interdependent groups (project team at work, study group, golf team, sorority, fraternity) and relationships (close friend, employee). In addition, cooperativeness and trustingness were highly valued across all interdependent social contexts, a result also predicted from our sociofunctional perspective.

Participants also valued task-relevant characteristics, but in more focused, task-dependent ways. Indeed, we obtained support for 16 of our 17 domain-specific predictions from the Likert-scale ratings of importance in Study 2, and the one prediction lacking support here—that attractiveness would be highly valued for sorority members—was supported by the most necessary nominations. For instance, physical health was highly valued for an athletic team (i.e., golf team), intelligence was highly valued for work-focused groups and relationships (i.e., project team at work, study group, employee), and extraversion was highly valued for social-oriented contexts (i.e., sorority, fraternity, close friendship). In addition, newly added traits related to benevolence, universalism, and resource potential were occasionally considered important for particular target individuals. We note, however, that other characteristics were seldom more important than trustworthiness for any ideal interdependent other.[10] In all, although some attributes were as important as (or more important than) trustworthiness for certain interdependence contexts, it is useful to note that

[9] Because it is assumed to be a general umbrella term, the *cooperative* item is not included in any of the specific cooperativeness components. However, for comparison purposes, Table 6 presents the importance judgments for this item across target individuals.

[10] As exceptions to this, pairwise simple comparisons revealed that intelligence was more important than trustworthiness for an ideal project team member and study group member, ambition was more important than trustworthiness for an ideal study group member and golf team member, Extraversion was more important than trustworthiness for an ideal sorority member and fraternity member, and physical health was more important than trustworthiness for an ideal golf team member (all *p*s $< .05$).

Table 6
Importance of Cooperativeness Components Across Ideal Target Individuals (Study 2)

Cooperativeness component	Project team	Study group	Golf team	Sorority	Fraternity	Close friend	Employee	Chance level
				Mean Likert-scale importance ratings				
Communal orientation	6.05_a	5.74_a	5.44_a	6.52_a	6.24_a	7.04_a	5.70_a	
Exchange orientation	6.33_b	5.63_a	5.76_b	6.24_b	6.11_a	6.47_b	6.42_b	
Cooperative (alone)	8.34	8.10	6.73	7.51	7.28	6.78	8.26	
				Frequency of most necessary nominations				
Communal orientation	0	1.5	0	2.8	4.2	10.1	0	6.7
Exchange orientation	1.5	0	4.3	0	0	1.5	0	5.3
Cooperative (alone)	**14.7**	2.9	1.4	0	0	0	2.8	1.3

Note. Means marked with different subscripts within each column are significantly different according to repeated measures *t* tests ($p < .05$). Observed most necessary frequencies presented in boldface are significantly greater than chance frequency ($p < .05$).

none of these characteristics showed cross-domain importance in the most necessary nominations (as trustworthiness did).

The evidence for the increased importance of cooperativeness is somewhat more equivocal. Although participants rated cooperativeness as important across the various groups and relationships, its importance exceeded the importance of other valued traits in only a handful of instances.[11] We return to the hypothesized status of cooperativeness as a highly valued characteristic in the General Discussion.

We further note that two conceptual replications of Study 2 offer strong corroboration of these findings (Cottrell & Neuberg, 2006b). As in the current study, we asked two samples of university students to consider the importance of assorted characteristics for a wide variety of social contexts ranging from relatively high interdependence (e.g., romantic partners, basketball teams) to relatively low interdependence (e.g., casual acquaintances, partygoers at a social gathering). These data make two valuable points. First, as in Study 2, these replications convincingly demonstrate the cross-domain importance of trustworthiness and (to a lesser extent) cooperativeness as well as the domain-specific importance of other characteristics, for a wide variety of highly interdependent groups and relationships. Moreover, these replications offer unique insights on social contexts requiring relatively little interdependence: Trustworthiness and cooperativeness were not considered especially important for a low-interdependence partygoer at a social gathering—the only social context (in the current Study 2 or its conceptual replications) that reveals a decreased importance of trustworthiness—although these characteristics were still considered rather important for a low-interdependence casual acquaintance. Building on these findings, we further explored the importance of trustworthiness and cooperativeness for low-interdependence social contexts in Study 3.

It is interesting to note that three traits—extraversion, emotional stability, and respectfulness—each emerged as highly important across all target individuals. Two critical caveats must be noted, however, that soften any conclusions about the broad, cross-domain importance of these characteristics: First, as noted above, these characteristics were seldom rated as more important than trustworthiness for any ideal interdependent other. Moreover, emotional stability and respectfulness were never selected as most necessary above chance levels, and extraversion was selected above chance levels only for the target individuals focused on affiliation tasks—sorority member, fraternity member, and close friend. In contrast, trustworthiness was selected as most necessary for all seven group members and relationship partners. The differences in findings for extraversion, emotional stability, and respectfulness across the two measures of importance point to the value of constraining judges' ability to assign high importance ratings for many characteristics. Study 3 was especially designed to constrain participants' selections so that we could tease apart absolutely indispensable characteristics from valued, but not essential, characteristics.

A comparison of the findings of Studies 1 and 2 persuasively demonstrates the conceptual limitations of inquiring about valued traits for a generic other rather than specific group members or relationship partners. One would be left with a quite different conclusion about important traits by considering only nonspecific others, as participants did in Study 1, rather than specific others, as they did in Study 2. For instance, the data from Study 1 suggest that physical health and intelligence are particularly important for generic others, whereas conscientiousness and open-mindedness are less so. These suggestions run counter, however, to the rich findings of Study 2, which suggest that the importance placed on these characteristics varies greatly with the specific interdependent social context (e.g., health is less important for study group members, intelligence is less important for golf team members, conscientiousness is very important for employees, and open-mindedness is very important for work project team members). For target characteristics other than trustworthiness (and sometimes cooper-

[11] Pairwise simple comparisons revealed that cooperativeness was more important than other characteristics in six instances: emotional stability for an ideal project team member ($p < .05$); agreeableness, extraversion, compassion, and tolerance for an ideal study group member (all $ps < .05$); and ambition for an ideal close friend ($p < .05$).

ativeness and trustingness), whether we judge them to be important depends on their task relevance to the specific group or relationship context of interest.

Study 2 also offers a preliminary look at a more textured, component-based view of trustworthiness and cooperativeness. Initial evidence revealed that people do indeed draw distinctions among three components of trustworthiness—dependability, honesty, and loyalty. Dependability, in particular, was considered a highly valued trustworthiness component for all seven target individuals. For instance, dependability emerged as most important for outcome-focused group members and relationship partners (i.e., project team member, study group member, golf team member, employee). That is, when the goal is a specific desirable outcome (e.g., successful completion of a work project, good grade on a final exam, victory in an athletic competition, productivity in an occupational setting), participants reported that it was more important for others to be reliable than honest or loyal. In addition, participants sometimes judged other trustworthiness components as important as dependability. In social organizations requiring substantial long-term commitment from their members (e.g., sororities, fraternities), loyalty was considered as important as dependability. And in emotionally intimate, long-term relationships (i.e., close friendships), honesty was considered as important as dependability.

We also obtained preliminary evidence that two components of cooperativeness—communal orientation and exchange orientation—are indeed differentially valued across various interdependence contexts. In general, participants valued a communal orientation more for affiliation-oriented groups and relationships that likely serve functions largely related to emotional support—sorority members, close friends—whereas they valued an exchange orientation more for groups and relationships that likely serve functions less related to emotional support—project team at work, golf team, employee. Though admittedly preliminary, these findings are consistent with research and theory by Clark and colleagues (e.g., Clark & Mills, 1979; Mills & Clark, 1982).

Study 3

The findings thus far support our sociofunctional approach to valued characteristics, especially trustworthiness. Specifically, trustworthiness—the foundation of human sociality and interdependence—is seen as highly important across group members and relationship partners characterized by different tasks and functions; cooperativeness, albeit less so, is also considered important across social interdependencies, although our participants have not clearly differentiated it from other valued characteristics as they clearly have done with trustworthiness. In contrast, people differentially value other characteristics in others depending on the attribute's relevance to the task of the particular group or relationship.

As Li and his colleagues (2002) noted, when making judgments on a series of independent rating scales, it is easy to assign high values to many characteristics—it costs nothing, for example, to circle an importance rating of 9 on all scales—thereby potentially obscuring meaningful differences in importance among attributes. We began to remedy this problem by also asking our participants to select the single most necessary characteristic available to them. The methodology of Study 3 more directly forced participants to prioritize their choices, thereby enabling us to differentiate between those characteristics seen as necessities and those seen as luxuries.

In an adaptation of the budget allocation paradigm developed by Li et al. (2002), participants were given limited quantities of tokens with which they could purchase particular levels of 10 characteristics to design one of several ideal group members or relationship partners. In an ostensibly random fashion, we slowly increased the number of tokens in participants' budgets to assess the importance placed on these characteristics. Investment in a characteristic when one has a limited budget (similar to having to choose a single characteristic as most important) suggests the characteristic is prioritized as a necessity; investment in a characteristic only when one possesses a large budget (similar to being able to assign an importance rating of 9 on all scales) suggests the characteristic is seen as a luxury. From our perspective, trustworthiness (especially) and cooperativeness were hypothesized to be necessities for a wide range of qualitatively different interdependent social interactions. Moreover, although other valued characteristics may be considered necessities for particular interdependencies, their importance ought to vary greatly with their relevance to the specific tasks, goals, and functions of the particular group or relationship of interest.

In addition, Study 3 overcomes a minor design imperfection of Studies 1 and 2—namely that the various trait categories differed in the number of individual characteristics representing them. Although we accounted for these differences in our analyses of the most necessary characteristics, one might argue that the trustworthiness and cooperativeness categories were artifactually made more salient by the greater number of items representing them, which could bias participant reports toward our first two hypotheses. Study 3 participants contemplated 10 trait categories, each described by the same number of specific adjectives. To the extent we observe results compatible with those from the previous studies, Study 3 offers us assurance that the hypothesis-supporting findings of Studies 1 and 2 cannot be attributed to this methodological artifact.

Method

Participants

A total of 232 undergraduate students (108 men, 124 women) participated in exchange for required course credit in introductory psychology classes. They were, on average, 19.52 years old (SD = 2.19).

Materials and Procedure

Upon their arrival at the experimental session, we randomly assigned participants to design an ideal member of one of four target groups or an ideal partner for one of four relationship types (see below). Participants designed their ideals using a computer program that allowed purchases with mouse clicks; it also performed arithmetic and graphing operations to offer visual representations of the ideal's level on each characteristic.

When participants clicked the mouse on the up-arrow icon underneath a particular characteristic, a bar representing the percentile level of that characteristic would increase; the numeric percentile value was also displayed above this bar. If participants made a mistake or were dissatisfied with an increase, they could click the mouse on a down-arrow icon to decrease the percentile level of the characteristic. For each budget, this process of purchases and returns continued until participants were satisfied with their selections.

After a brief lesson on the meaning of percentile scales, participants were informed via instructions on the computer: "Your task is to select the percentile level where you think your ideal should fall on each characteristic. The catch is that you will have to pay for your selections with a given budget of tokens."

After a practice task to increase familiarity with the computer program, participants began the budget allocation tasks, which included five budgets of increasing size (see below). Percentile levels of all 10 characteristics began at the 0th percentile. The cost of each characteristic increased at an exponentially decreasing rate: Every two tokens spent on a characteristic increased the ideal's percentile level on that characteristic half the distance from its current level to 100. That is, as participants invested more and more in a given characteristic, they received less and less increase in percentile level for that characteristic. In addition to minimizing ceiling effects, this procedure also reflects that it is usually increasingly difficult to locate and obtain additional increments of any desirable commodity in everyday social interactions.

For each budget, participants were informed that the computer program would randomly determine the number of remaining budgets and the number of tokens in each of these budgets. Because the supply of tokens could ostensibly end at any time, participants were explicitly instructed to spend each budget as if they would receive no more tokens, thus further inducing a prioritization of choices. Following completion of all five budget allocation rounds, participants completed a supplementary paper questionnaire containing several individual difference measures, were debriefed, and then released.

Traits available for purchase. Participants designed their ideals using 10 assorted characteristics, each operationalized by three specific adjectives: agreeableness (described by *kind*, *warm*, *sympathetic*), assertiveness (*bold*, *ambitious*, *dominant*), conscientiousness (*organized*, *orderly*, *neat*), cooperativeness (*sharing*, *reciprocity-minded*, *collaborative*), emotional stability (*even-tempered*, *calm*, *relaxed*), extraversion (*outgoing*, *talkative*, *sociable*), intelligence (*smart*, *knowledgeable*, *bright*), open-mindedness (*creative*, *innovative*, *imaginative*), physical appeal (*attractive*, *beautiful*, *handsome*), and trustworthiness (*honest*, *loyal*, *dependable*). Because of technical constraints of this experimental paradigm, we were limited in the number of characteristics participants could consider. We selected these 10 characteristics from the broader-reaching characteristic set from Study 2 in order to capture a reasonable number of traits relevant to a large number of social contexts. Participants viewed the characteristics in either alphabetic order or in reverse alphabetic order.

Target individuals. Participants created either one of six target individuals from affiliations that are usually meaningfully interdependent—basketball team member, project team member at work, sorority or fraternity member, long-term romantic partner, close family member, or employee—or one of two targets with whom people are rarely meaningfully interdependent—casual acquaintance or person waiting at a bus stop.[12,13]

As in Study 2, we again expected trustworthiness and cooperativeness to emerge as highly important across the meaningfully interdependent groups and relationships, and we expected the importance of other characteristics to vary with the tasks and goals of each interdependent group or relationship. These domain-specific predictions for an ideal project team member, sorority or fraternity member, and employee are outlined in Study 2; below we outline such predictions for an ideal romantic partner, family member, person waiting at a bus stop, and casual acquaintance. We make no domain-specific predictions for an ideal basketball team member, however, as the Study 3 characteristics (beyond trustworthiness and cooperativeness) were not hypothesized to be especially relevant to the tasks and goals of a basketball team.

Both romantic relationships and family relationships may be considered intimacy groups (e.g., Lickel et al., 2000), though these relationships involve features that distinguish them from the sororities, fraternities, and close friendships explored in Study 2. Successful romantic and family relationships require the completion of tasks related to smooth and coordinated day-to-day social interactions, which should enhance the value of agreeableness for both interdependence contexts. However, qualitative differences in the nature of these relationships lead to some textured predictions: The physical intimacy of a romantic relationship should enhance the importance of physical attractiveness for a romantic partner, and the uniquely involuntary and permanent nature of family ties should enhance the importance of emotional stability for a family member.

To provide control conditions, we also included two target individuals involving low interdependence with others—a person waiting at a bus stop and a casual acquaintance. For theoretical reasons, we did not expect trustworthiness and cooperativeness to be especially important for these target individuals because they lack true interdependence. As noted above, however, extant empirical support for this hypothesis is mixed as trustworthiness and cooperativeness do indeed seem less important for some low-interdependence contexts (e.g., partygoers at social gathering) but still somewhat important for other low-interdependence contexts (e.g., casual acquaintances; Cottrell & Neuberg, 2006b). We did expect that emotional stability would be important for a person at a bus stop because it indicates that an individual will behave in a calm, nonthreatening manner—an attribute that presumably assures others of

[12] Female participants considered a sorority member; male participants considered a fraternity member.

[13] Using a 7-point scale, the 68 college students queried by Cottrell and Neuberg (2006a) evaluated the interdependence among basketball team members ($M = 6.40$), project team members at work ($M = 5.94$), members of Greek social organizations (sorority members: $M = 4.24$; fraternity members: $M = 4.18$), long-term romantic partners ($M = 6.56$), family members ($M = 5.44$), employees ($M = 4.56$), casual acquaintances ($M = 2.10$), and people waiting at a bus stop ($M = 1.22$).

their physical safety while at a bus stop with a stranger. Moreover, for a casual acquaintance, extraversion should be important because it creates social encounters, and agreeableness should be important because it aids in the smooth, coordinated flow of these social interactions.

Size of budget. Participants allocated tokens in five sequential budgets of increasing size: 1 token, 4 additional tokens (i.e., 5 cumulative tokens), 5 additional tokens (i.e., 10 cumulative tokens), 10 additional tokens (i.e., 20 cumulative tokens), and 10 additional tokens (i.e., 30 cumulative tokens). As participants received more tokens, they could not remove tokens they had spent on previous budget rounds; thus, each budget allocation served as a floor for the subsequent budget allocation.

Results

Opening Investment: The Most Essential Characteristic?

The sociofunctional perspective predicts that trustworthiness (especially) and cooperativeness are necessities in interdependent social situations. Participants should thus be extremely likely to allocate their first token toward these traits regardless of target individual.

Table 7 presents the frequency with which participants allocated their first tokens to each trait category for each target individual. If all characteristics were equally important, we should expect participants to randomly invest the first token, producing an even distribution of tokens across all traits (i.e., 10% for each trait category). To the extent that some observed frequencies deviate from this chance frequency, the characteristics differ in importance. We thus tested our hypotheses via a series of binomial tests conducted within each target individual. Specifically, we compared the observed frequency against the expected frequency for each trait (10%).

Initial investments strongly supported our hypotheses about the importance of trustworthiness. First, participants invested their first token in trustworthiness at rates greater than expected by chance, in all cases involving targets in highly interdependent groups or relationships—basketball team member (23.3%; $p = .026$), project team member (24.1%; $p = .022$), sorority or fraternity member (60.7%; $p < .0001$), romantic partner (58.6%; $p < .0001$), family member (55.2%; $p < .0001$), and employee (51.7%; $p < .0001$)—and even for a casual acquaintance (27.6%; $p = .006$). Only in the case of the low-interdependence person waiting at a bus stop did participants not invest initially in trustworthiness.

Second, participants did sometimes invest their first token in other characteristics at rates beyond that expected by chance, and in ways that tended to be consistent with our task analyses: cooperativeness for a basketball team member (23.3%; $p = .026$), intelligence for a project team member (34.5%; $p < .001$), agreeableness for a casual acquaintance (27.6%; $p = .006$), and open-mindedness for a person waiting at a bus stop (20.7%; $p = .06$). Note that these other traits were not highly valued for initial investment across target persons, as trustworthiness had been.

Investment Across Budgets

In all, participants designed an ideal target individual by allocating 30 total tokens received in five portions (1, +4 new, +5 new, +10 new, +10 new). To simplify the presentation of these data, we combined the first three token portions and calculated the percentage of each 10-token portion invested in each characteristic for each target individual.

Figure 1 presents these mean percentages. A three-way (Trait × Target Individual × Budget) mixed ANOVA on the percentage invested in each trait revealed a significant, but rather small, three-way interaction, $F(126, 4032) = 1.54$, $p < .001$, partial $\eta^2 = .046$. Indeed, as a perusal of Figure 1 reveals, investment in each trait was rather consistent across the three 10-token portions: Despite numeric changes in these percentages across budget, traits that received a sizeable portion of tokens at the first budget continued to receive sizeable portions of tokens at later budgets. Because of the small three-way effect and the consistency across budgets, we instead focus on the more meaningful two-way interaction between trait and target individual, $F(63, 2016) = 5.68$, $p < .001$, partial $\eta^2 = .151$.[14]

In the context of this two-way (Trait × Target Individual) mixed factorial design, we tested our hypotheses via a series of simple contrasts collapsing across the three budgets. Similar to the previous studies, we conducted planned contrasts comparing the percentage of budget invested in each predicted trait against the average percentage invested in the nonpredicted traits for each target individual, as well as exploratory contrasts comparing the percentage of budget invested in each nonpredicted trait against the average percentage invested in the other nonpredicted traits for each target individual (using a Bonferroni-adjusted alpha of .008).

Basketball team member. Consistent with predictions, trustworthiness ($F = 6.17$, $p = .01$, partial $\eta^2 = .03$) and cooperativeness ($F = 60.22$, $p < .001$, partial $\eta^2 = .21$) received more investment than did nonpredicted traits for an ideal basketball team member. Exploratory analyses further revealed that participants invested more in intelligence ($F = 11.06$, $p = .001$, partial $\eta^2 = .05$) and assertiveness ($F = 34.22$, $p < .001$, partial $\eta^2 = .13$) than in the other nonpredicted characteristics.[15]

Project team member. Participants invested more in trustworthiness ($F = 9.81$, $p = .002$, partial $\eta^2 = .04$), cooperativeness ($F = 25.53$, $p < .001$, partial $\eta^2 = .10$), open-mindedness ($F = 20.89$, $p < .001$, partial $\eta^2 = .09$), and intelligence ($F = 46.52$, $p < .001$, partial $\eta^2 = .17$) than in the nonpredicted traits for an ideal project team member; these effects are consistent with predictions. Contrary to predictions, however, conscientiousness did not receive enhanced investment. Moreover, exploratory analyses revealed that none of the nonpredicted characteristics received enhanced investment.

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[14] We did explore the three-way interaction via examination of the simple two-way interaction between trait and budget for each target individual. Although statistically significant for five target individuals, this interaction explained very little variation in token allocation for any target individual and did not reveal any consistent and discernible patterns within the data. We therefore focus our presentation of a large amount of data on differences among traits for each target individual, averaged across the three budgets.

[15] Degrees of freedom values for all contrasts in this section are 1 and 224.

Table 7
Frequencies of Investment of First Token in Each Trait Category Across Ideal Target Individuals (Study 3)

Trait	Chance level	Basketball team	Project team	Sorority or fraternity	Person at bus stop	Romantic partner	Family member	Employee	Casual acquaintance
Trustworthiness	10.0	**23.3**	**24.1**	**60.7**	17.2	**58.6**	**55.2**	**51.7**	**27.6**
Cooperativeness	10.0	**23.3**	3.4	7.1	0	0	3.4	3.4	3.4
Agreeableness	10.0	6.7	13.8	7.1	6.9	10.3	13.8	0	**27.6**
Extraversion	10.0	0	3.4	14.3	3.4	3.4	0	10.3	3.4
Conscientiousness	10.0	0	0	0	3.4	0	0	10.3	0
Emotional stability	10.0	6.7	3.4	0	17.2	3.4	17.2	0	3.4
Open-mindedness	10.0	3.3	6.9	7.1	**20.7**	3.4	3.4	13.8	10.3
Intelligence	10.0	13.3	**34.5**	0	6.9	13.8	0	3.4	10.3
Assertiveness	10.0	16.7	10.3	0	10.3	0	3.4	6.9	6.9
Attractiveness	10.0	6.7	0	3.6	13.8	6.9	3.4	0	6.9

Note. All entries are percentage values. Entries in the chance level column represent the frequency with which each trait category is expected to receive the first token by chance alone. All other entries represent observed frequencies. Observed frequencies presented in boldface are significantly greater than the chance frequency ($p < .06$).

Sorority or fraternity member. Consistent with predictions, participants invested in trustworthiness ($F = 25.13$, $p < .001$, partial $\eta^2 = .10$) and agreeableness ($F = 3.65$, $p = .05$, partial $\eta^2 = .02$) at rates greater than they invested in the nonpredicted traits for an ideal sorority or fraternity member; participants also invested in extraversion ($F = 2.83$, $p = .09$, partial $\eta^2 = .01$) at a slightly enhanced rate. Predictions about the importance of attractiveness (for sorority members) and cooperativeness were not supported, however. In exploratory analyses, open-mindedness ($F = 8.07$, $p = .005$, partial $\eta^2 = .04$) received greater investment than did the other nonpredicted characteristics.

Romantic partner. Consistent with predictions, participants invested in trustworthiness ($F = 36.81$, $p < .001$, partial $\eta^2 = .14$) and physical attractiveness ($F = 12.05$, $p = .001$, partial $\eta^2 = .05$) at greater levels than nonpredicted traits for an ideal romantic partner. Contrary to predictions, however, cooperativeness and agreeableness did not receive enhanced investment. In exploratory analyses, intelligence ($F = 23.97$, $p < .001$, partial $\eta^2 = .10$) received greater investment than did the other nonpredicted characteristics.

Family member. Consistent with predictions, participants invested more in trustworthiness ($F = 44.73$, $p < .001$, partial $\eta^2 = .17$), agreeableness ($F = 22.15$, $p < .001$, partial $\eta^2 = .09$), and emotional stability ($F = 14.33$, $p < .001$, partial $\eta^2 = .06$) than in nonpredicted traits when creating an ideal family member. Contrary to predictions, however, participants did not invest in cooperativeness to an enhanced degree. Exploratory analyses revealed that participants invested more in intelligence ($F = 13.00$, $p < .001$, partial $\eta^2 = .06$) than in other nonpredicted characteristics.

Employee. Aligned with predictions, participants invested more in trustworthiness ($F = 55.34$, $p < .001$, partial $\eta^2 = .20$), conscientiousness ($F = 5.56$, $p = .02$, partial $\eta^2 = .02$), and intelligence ($F = 31.62$, $p < .001$, partial $\eta^2 = .12$), and marginally more in cooperativeness ($F = 3.00$, $p = .09$, partial $\eta^2 = .01$), than in the nonpredicted traits to create an ideal employee. In exploratory analyses, open-mindedness ($F = 16.55$, $p < .001$, partial $\eta^2 = .07$) received more investment than did the other nonpredicted characteristics.

Casual acquaintance. Although both agreeableness and extraversion were expected to receive enhanced investment in the creation of an ideal casual acquaintance, only the prediction for agreeableness was supported ($F = 9.04$, $p = .003$, partial $\eta^2 = .04$). In exploratory analyses, trustworthiness ($F = 10.67$, $p = .001$, partial $\eta^2 = .05$) did receive more investment than did the other nonpredicted characteristics.

Person waiting at a bus stop. For an ideal person waiting at a bus stop, emotional stability was expected to receive enhanced investment, but this prediction was not supported. However, in exploratory analyses, trustworthiness ($F = 11.70$, $p = .001$, partial $\eta^2 = .05$) did receive greater investment than did the other nonpredicted characteristics.

In summary, participants allocated more of their tokens to increase trustworthiness than to increase the other traits. As in the previous studies, this investment pattern emerged as strikingly consistent across all eight target individuals representing different tasks, goals, and functions—even those of relatively low interdependence value. Although participants also showed enhanced investment on other characteristics, they did so without consistency across target individuals.

The substantial, consistent investment in trustworthiness is shown in Figure 1. The lines plotted on the panels in this figure represent the final level of each characteristic for each ideal individual (i.e., the total amount of each trait purchased for each ideal). People creating different target individuals tended to increase their ideals' trustworthiness percentile higher than the percentile levels of the other nine characteristics.

Discussion

Replicating Studies 1 and 2, trustworthiness emerged as particularly important across all groups and relationships in Study 3. As expected, we note that its importance did decrease slightly for the low-interdependence person at a bus stop and casual acquaintance. Moreover, participants indicated the importance of trustworthiness early in the budget allocation task—by often purchasing trustworthiness with their very first

token—and continued to invest in it throughout the allocation task. This is a crucial point given the exponentially decreasing cost of each characteristic. People continued to spend tokens on trustworthiness even though they were acquiring a smaller percentile increase in their ideals' trustworthiness than the percentile increase potentially obtained by investing in a less-purchased characteristic. That is, participants sacrificed the opportunity to substantially increase other traits' percentiles because they chose to slightly increase the trustworthiness percentile.

Cooperativeness was particularly valued for basketball team members and work project team members. Indeed, for these two target individuals, trustworthiness and cooperativeness were considered similarly important (pairwise trustworthiness vs. cooperativeness ps $> .20$). In contrast, for the remaining six target individuals, trustworthiness was valued more highly than cooperativeness (pairwise trustworthiness vs. cooperativeness ps $< .001$), a finding consistent with our hypothesis that cooperativeness would generally be of lesser importance than trustworthiness. Inconsistent with our expectations, though, the rated importance of cooperativeness failed to exceed that of the highly valued characteristics (all pairwise ps $> .05$). Thus, Study 3 does not demonstrate strong support for the prediction that cooperativeness would have a special status similar to trustworthiness, albeit to a somewhat lesser degree. Later, we consider further the status of cooperativeness as a valued characteristic.

Other characteristics also emerged as important in ways consistent with our task analyses of each interdependence context. For instance, our participants indicated that intelligence is important for a project team member and an employee, agreeableness is important for a family member and a casual acquaintance, extraversion is important for a sorority or fraternity member, and physical appeal is important for a romantic partner. However, participants' token allocation never suggested that these other characteristics were significantly more important than trustworthiness for an ideal individual in an interdependent social context: Token investment for trustworthiness was either significantly larger than that for task-specific characteristics (i.e., for a sorority or fraternity member, romantic partner, family member, and employee; all pairwise ps $< .01$) or nonsignificantly different from that for task-specific characteristics (i.e., for a project team member and study group member; all pairwise ps $> .10$). Moreover, none of these other characteristics showed what appears to be the signal feature of trustworthiness within this investment paradigm—investment early, investment over time, and investment across all types of target individuals. In all, we believe there is strong evidence to characterize trustworthiness as a necessity for nearly any interdependent social interaction. Other valued characteristics, in contrast, may be best characterized as necessities for some interdependencies but luxuries for other interdependencies (e.g., assertiveness may be a necessity for a basketball team member but a luxury for a project team member; open-mindedness may be a necessity for a project team member but a luxury for a family member).

General Discussion

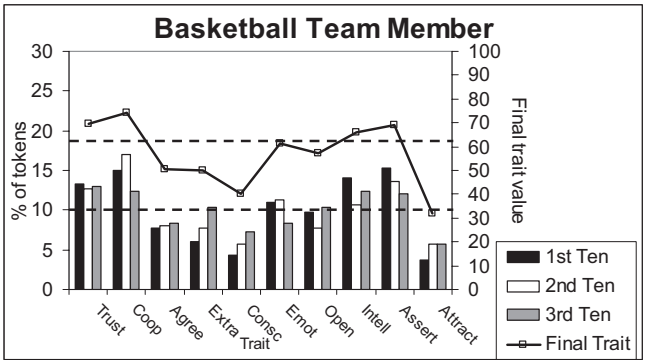
Humans, as discriminately social creatures, make frequent judgments about others' suitability for interdependent social relations. Which characteristics of others guide these judgments and, thus, shape patterns of human affiliation? Extant research is only minimally useful for answering this question, for several reasons: It reveals little consensus on the person characteristics that are highly valued; it relies largely on empirical, rather than theoretical, strategies for suggesting which characteristics should be especially valued; it tends to imply that a single configuration of characteristics will be considered ideal across all social contexts; and it fails to differentiate characteristics that may be nearly essential to a social interaction from those that may be important but not essential.

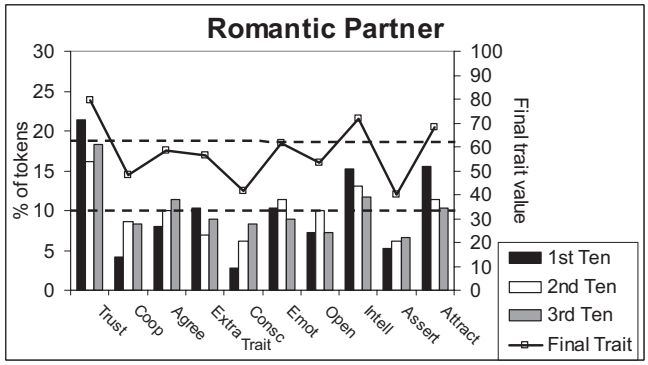
To derive a set of predictions about trait preferences, we used a sociofunctional analysis (e.g., Neuberg et al., 2000) that generates specific hypotheses about the thoughts, feelings, and behaviors prevalent in contemporary human psychology from an understanding of features fundamental to human sociality (e.g., Cottrell & Neuberg, 2005). Given the central importance of group member trustworthiness and cooperativeness to the operational integrity of social groups and relationships, we predicted that (a) people highly value trustworthiness (in particular) and cooperativeness (to a lesser extent) in others with whom they may be socially interdependent, (b) they do so regardless of the particular tasks or functions these others may serve for them, and (c) they differentially value other characteristics in others depending on the relevance of these characteristics to the specific tasks or problems faced. To our knowledge, these hypotheses are unique and, until now, untested.

We explored these hypotheses in three studies (see also Cottrell & Neuberg, 2006b). In all, we obtained resounding support for the predicted importance of trustworthiness. Across all three studies, involving different measures of trait importance and different groups and relationships, trustworthiness was indeed considered extremely important for a wide range of interdependent others. That is, people tended to assign trustworthiness high values on Likert scales of importance, to select trustworthiness as the most necessary characteristic, and to allocate large portions of limited resources to increase target trustworthiness. Though generally important across the studies, cooperativeness emerged as less valuable than trustworthiness.

Other characteristics were also often deemed important, although for a more constrained and focused set of social circumstances, also as expected. In general, the data suggest that emotional stability and extraversion are important for many different social interdependencies; conscientiousness, open-mindedness, and assertiveness are important for work-related groups and relationships; and physical health is important for athletic teams. We again note that this finding—stated generally that different traits are relevant across different social contexts—is consistent with other functional approaches (e.g., Gill & Swann, 2004; McArthur & Baron, 1982; Swann, 1984).

We chose to investigate the characteristics valued for ideal group members and relationship partners because we were most interested in constructing a model of highly desired attributes, whether or not they were typically attained in reality. However,


Basketball Team Member
% of tokens
Final trait value
Trait
Trust
Coop
Agree
Extra
Consc
Emot
Open
Intell
Assert
Attract
1st Ten
2nd Ten
3rd Ten
Final Trait


Romantic Partner
% of tokens
Final trait value
Trait
Trust
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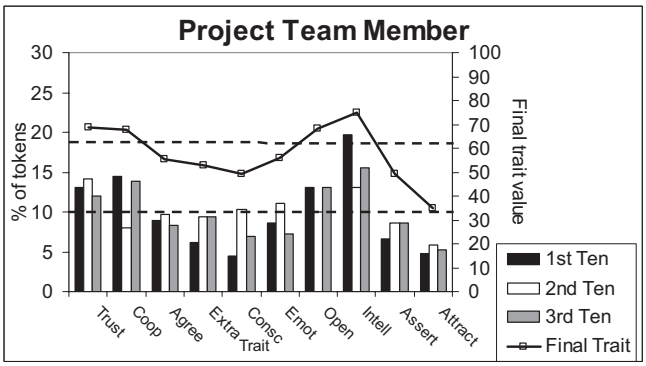
3rd Ten
Final Trait


Project Team Member
% of tokens
Final trait value
Trait
Trust
Coop
Agree
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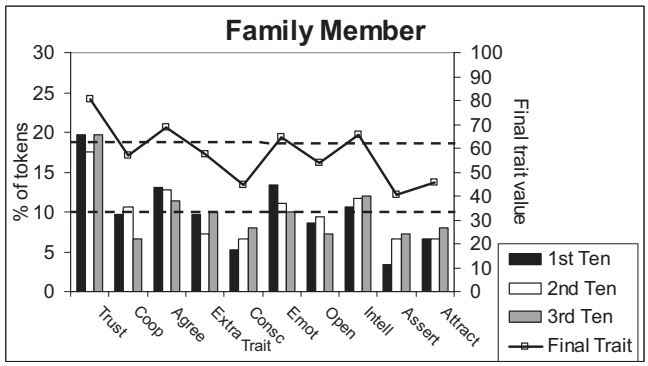
Assert
Attract
1st Ten
2nd Ten
3rd Ten
Final Trait


Family Member
% of tokens
Final trait value
Trait
Trust
Coop
Agree
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Attract
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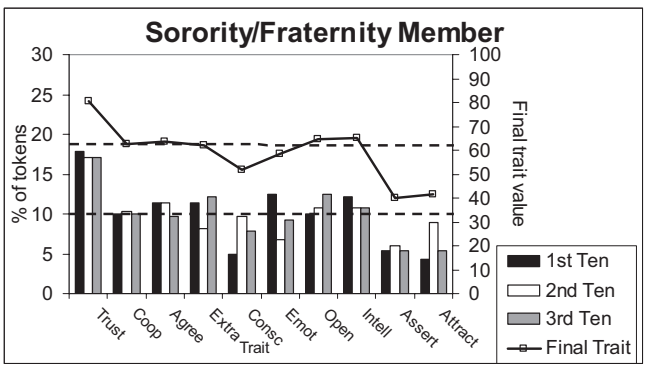
2nd Ten
3rd Ten
Final Trait


Sorority/Fraternity Member
% of tokens
Final trait value
Trait
Trust
Coop
Agree
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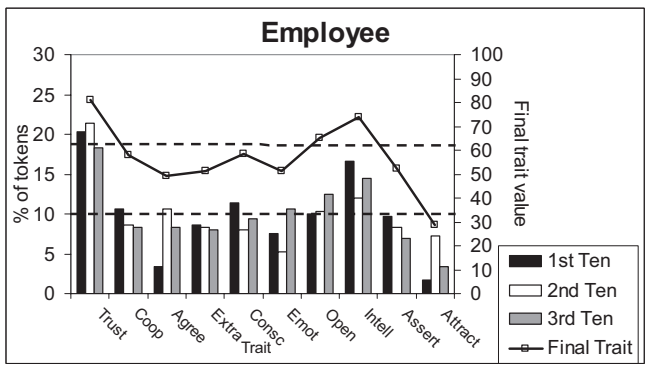
Consc
Emot
Open
Intell
Assert
Attract
1st Ten
2nd Ten
3rd Ten
Final Trait


Employee
% of tokens
Final trait value
Trait
Trust
Coop
Agree
Extra
Consc
Emot
Open
Intell
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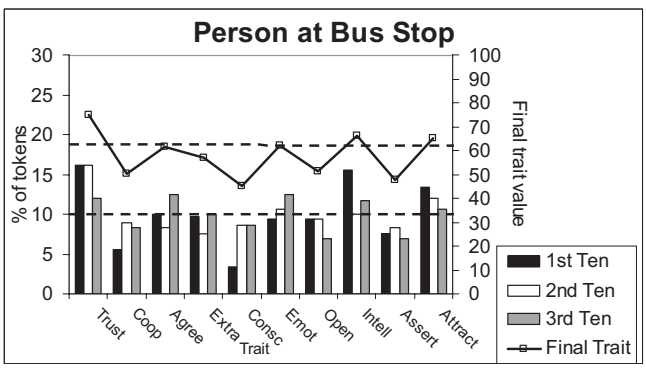
Attract
1st Ten
2nd Ten
3rd Ten
Final Trait


Person at Bus Stop
% of tokens
Final trait value
Trait
Trust
Coop
Agree
Extra
Consc
Emot
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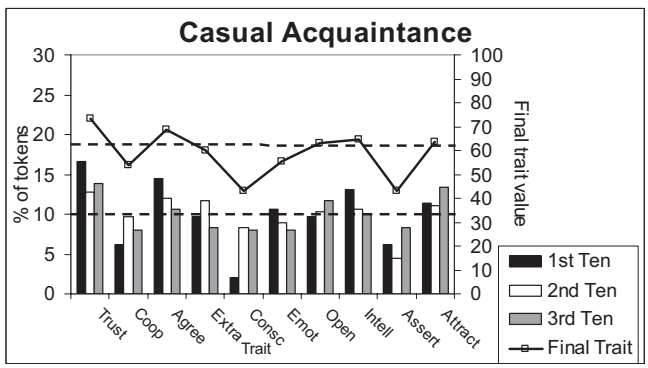
Assert
Attract
1st Ten
2nd Ten
3rd Ten
Final Trait


Casual Acquaintance
% of tokens
Final trait value
Trait
Trust
Coop
Agree
Extra
Consc
Emot
Open
Intell
Assert
Attract
1st Ten
2nd Ten
3rd Ten
Final Trait

it is important to consider the occurrence of these ideal characteristics in actual social interactions. In real social interactions (e.g., work group, athletic team, marriage), individuals usually find themselves unable to completely acquire their ideals (e.g., maximum intelligence, athleticism, or attractiveness). Indeed, people may often make trade-offs among various positive characteristics when pursuing actual interaction partners (e.g., Fletcher & Simpson, 2000), though we expect that their affiliation preferences are nonetheless generally guided by ideal characteristics.

The Primacy of Trustworthiness

As suggested by our theoretical analysis and supported by our empirical investigations, trustworthiness can be considered of paramount value. Because there are no guarantees of others' future behavior, sociality, by its very nature, involves some degree of vulnerability and uncertainty. Seeking trustworthy group members and relationship partners, then, may represent an important psychological mechanism acting to reduce this vulnerability, both actual and perceived. That is, even while facing this inherent vulnerability, people want to feel confident that their family, friends, and associates will tell them the truth, maintain their personal secrets, fulfill obligations to them, and more generally, promote their best interests. This trustworthiness seeking may, in fact, nicely complement additional psychological mechanisms for detecting others' cheating behavior (e.g., Cosmides & Tooby, 1992).

From a sociofunctional perspective, we expected people to value trustworthiness in others with whom they may share interdependent social interactions. However, we underestimated its value to social interactions involving less interdependence with others. Though not predicted, Study 3 participants indicated that characteristics related to trustworthiness were rather important also for low-interdependence groups and relationships (e.g., casual acquaintance, person waiting at a bus stop). We believe these robust effects of trustworthiness speak to its fundamental importance to human social interactions.

Our findings are consistent with other research and theory suggesting the necessity of trust (for a recent integration and review, see Simpson, in press). For example, close relationships researchers have hypothesized that interpersonal trust may be foundational to the development and maintenance of all close relationships (Hatfield, 1984; Holmes & Rempel, 1989). Moreover, interpersonal trust may be the single best defining characteristic of companionate love (Holmes & Rempel, 1989).

Researchers interested in developmental processes have also considered the importance of trust. Erikson's (1950; 1964) first psychosocial crisis is characterized as basic trust versus basic mistrust. For basic trust to develop during this stage, an infant must learn that people are generally reliable and dependable—in other words, that they are trustworthy. From a very young age, people seem to seek and value trustworthiness in others.

Moreover, questions about interpersonal trust (i.e., trust among individuals) and institutional trust (i.e., trust in government, trust in the justice system, etc.) have recently received serious contemplation from a diverse collection of scholars interested in sociology, political science, economics, industrial–organizational processes, and the like (e.g., Cook, 2001; Kramer & Tyler, 1996; Ostrom & Walker, 2003). Much of this literature supports the broad-reaching importance of trust and trustworthiness to social interdependencies. Indeed, Messick and Kramer (2001), who viewed trust as a form of social dilemma, hypothesized that people are naturally equipped to make quick judgments about others' trustworthiness in organizational settings and other social encounters. In addition, trust within work-focused interdependencies seems to offer valuable tangible benefits. For instance, authority structures that are perceived as trustworthy appear to be critical to maximizing the efficiency of a group, organization, or corporation (Miller, 2001; Tyler, 2001). Along similar lines, loyalty to one's group may enhance overall group performance in two ways: (a) Loyal group members tend to exert more effort and achieve more outcomes on behalf of the group (James & Cropanzano, 1994), and (b) other group members—encouraged by this model of commitment and effort—may increase their efforts and productivity for the group (Levine & Moreland, 2002).

As suggested by this sampling of relevant literatures, issues of trust and trustworthiness emerge from numerous research perspectives within varied topics (Simpson, in press). We believe this breadth further hints at the necessity of trustworthiness to all interdependent social interactions, whether they occur within a romantic relationship, a family unit, a business corporation, or a nation's government. We also suspect, however, that this breadth may result from the diversity of concepts subsumed under the trustworthiness umbrella, as noted above. Although the crux of trustworthiness is faith that another individual will honor commitments, we noted above that trustworthiness may encompass many different characteristics (e.g., honesty, loyalty, dependability, fidelity). This suggestion is consistent with those of other researchers (e.g., Baier, 1986; Hardin, 2001; Luhmann, 1979) who have contended that trust

Figure 1 (opposite). Participants' mean token allocation across budgets (Study 3). The bars, graphed on the left vertical axes, represent the proportion of each 10-token portion allocated to each characteristic; the dotted line at 10% indicates the expected proportion if participants invested equally in each characteristic. The solid lines, graphed on the right vertical axes, represent the cumulative percentile level bought on each characteristic; the dotted line at 62.5% indicates the expected percentile if participants invested equally in each characteristic. Trust = trustworthiness; Coop = cooperativeness; Agree = agreeableness; Extra = extraversion; Consc = conscientiousness; Emot = emotional stability; Open = open-mindedness; Intell = intelligence; Assert = assertiveness; Attract = attractiveness.

involves a three-part relation: Individual A trusts Individual B to perform Behavior X.[16] Arguing for the importance of considering the specific nature of Behavior X, Hardin (2001) noted that the individual trusted to keep a personal secret may not be the same individual trusted to repay a debt. We concur with these suggestions and designed Study 2 with that notion in mind. We find these issues (and the preliminary findings of Study 2) particular intriguing and encourage researchers to devote additional theoretical and empirical investigations to the systematic differentiation of these multiple components of trustworthiness. Although we expect the various components are all extremely important to human sociality, different social contexts require individuals to perform different behaviors, which may enhance the importance of a specific trustworthiness component for that social context.

The Role of Cooperativeness

We also predicted that cooperativeness would be highly valued for interdependent groups and relationships. Because humans are ultrasocial animals—reliant on their fellow group members to contribute valuable skills and resources toward shared goals—people ought to seek cooperative others for interdependent relationships. Across the current three studies, however, we did not find strong support for this hypothesis. Although cooperativeness was often valued across different interdependence contexts, it was not consistently considered more important than other valued characteristics. Moreover, when participants' choices were most constrained (i.e., most necessary nominations, first-token investments), cooperativeness rarely emerged as especially important.

It seems clear that cooperativeness is critical to ultrasociality (Brewer, 1997), and thus we are unwilling to reject at this point the possibility that cooperativeness is highly valued within interdependent relationships. There are at least two reasons for the lack of current empirical support that seem possible. First, people exchange specific resources (e.g., information, effort, material goods, a shoulder to cry on), and these resources differ on various dimensions (e.g., ease of generation, novelty, duration of value, ease of successful reciprocation). If it is the case that resources that differ on these dimensions are differentially valued, it may be that neither the concept of general cooperativeness nor the subfacets of exchange and communal cooperativeness are sufficiently textured to capture the value of various forms of cooperativeness as they are psychologically computed under natural social conditions. Stated in another way, general trait terms related to cooperativeness, at least of the sort we used here, may be insufficiently focused to engage the psychology we have sought to capture.

A second possible explanation for why the observed data failed to differentiate between cooperativeness and other valued characteristics may relate to the multicollinearity of importance ratings among many of our trait terms. As shown in Table 1, we found moderate to strong correlations between the importance of cooperativeness and the importance of other positive characteristics. Perhaps, then, the intercorrelations among these measures of trait importance obscured meaningful differences among the value placed on different attributes. This may be particularly the case if the favorability of certain characteristics is partially defined by elements of cooperativeness. For example, it is difficult to think of someone as being agreeable without also believing that person to be cooperative in certain ways. It may be that we would identify more clearly the perceived importance of various forms of cooperativeness if we inquired not about general trait labels but rather about beliefs about specific behaviors that imply cooperativeness as well as other traits partially confounded with it.

Beyond Trustworthiness and Cooperativeness

People, of course, value important characteristics beyond trustworthiness and cooperativeness. Task (or problem) analyses will often shed light on the other characteristics valued in a given social context (Buss, 1996; Driskell et al., 1987; Holland, 1985; Lusk et al., 1998; Rofe, 1984; Steiner, 1972). By detailing the behaviors needed to complete a particular task or to engage in a particular social interaction, researchers can identify the corresponding person characteristics that are likely to facilitate completion of the task. For example, because athletic competitions require individuals to exhibit physical stamina and skill, physical health ought to be important for members of athletic teams; the data presented above support this suggestion. In line with our task analyses, many person characteristics were indeed differentially valued across groups and relationships. Overall, we obtained substantial support for our domain-specific predictions: 16 of 17 supported in Study 2 and 10 of 15 supported in Study 3.

However, we also observed that extraversion, emotional stability, and respectfulness emerged as rather important across the interdependent groups and relationships examined in Study 2, a finding consistent with extant theory. Extraversion may act as an indicator of preference for activity and leadership—attributes that could help groups and relationships make progress toward important goals (Buss, 1996; Hogan, 1996). In addition, emotional stability may be important as a signal of one's ability to coordinate with others in repeated complex social interactions (Kurzban & Neuberg, 2005). Last, respectfulness may serve as a valuable marker of one's general willingness to follow the rules and norms of coordinated social interactions—especially those related to status hierarchies—a feature important to effective human sociality (Cottrell & Neuberg, 2005; Neuberg & Cottrell, 2002). Although these three characteristics (and others from Study 2) may be important in many different social arenas, we note that their cross-domain importance was observed only in the Likert-scale importance ratings (which did not limit participants' judgments of importance), but not in the most necessary nominations or the budget allocation paradigm (which constrained participants' judgments of importance). This is unlike the case of trustworthiness, which was considered extremely valuable across different measures of trait importance.

Extant Perspectives Revisited

In the introduction, we reviewed several bodies of literature relevant to valued characteristics. We return now to reconsider this existing research and theory. First, our data demonstrating the importance of trustworthiness are consistent with the research on the likability of different personal characteristics (Anderson, 1968) and the values guiding people's lives (Rokeach, 1973; Schwartz, 1992). Nonetheless, it is important to note that our data uniquely

[16] This perspective may be contrasted with the notion of generalized (or global) trust, arising in the personality and social psychology literatures (e.g., Rotter, 1971).

emerged from a theory-driven analysis of human social phenomena, whereas the majority of this other research developed with a more empirical focus.

In addition, we observed cross-domain variation in the importance of characteristics beyond trustworthiness and cooperativeness. These findings highlight the limited utility of research on human values (e.g., Rokeach, 1973; Schwartz, 1992) for understanding the characteristics people seek in others. If people were simply using their own general values and guiding life principles to assess others with whom they may be interdependent, then we should not find that characteristics vary in importance across specific interdependent groups and relationships. We do, however, observe strong evidence of such cross-domain variation.

Counter to some close relationships research (e.g., Barry, 1970; Byrne, 1971), we also failed to find strong evidence that people value similarity in others with whom they may be interdependent. Across various groups and relationships, similarity was consistently one of the least important characteristics. In fact, its average importance score was seldom above the midpoint (i.e., a 5 on the 9-point Likert scale) on the importance measure used in Studies 1 and 2. We do not believe that people never seek and value similar others. We note, for example, that Study 2 participants did consider similarity to be rather important for an ideal close friend. Nonetheless, by manipulating similarity in a context in which other person characteristics do not vary, we suspect that previous research has likely led to the impression that similarity is a more important variable for assessing others than it really is.

Last, we note the inconsistency between our data and the five-factor model of personality (Costa et al., 1991; Digman, 1990; Goldberg, 1990; John, 1990), which does not place trustworthiness and cooperativeness in prominent positions. In line with this, Paunonen and Jackson (2000) concluded that there are "plenty" of important dimensions of human behavior beyond the Big Five traits. Their reanalysis of data previously presented to support the Big Five model strongly suggests the existence of additional meaningful personality dimensions not captured by the Big Five conceptualization. Particularly relevant to our discussion is the presence of an honesty factor (i.e., honest, ethical, moral) that emerged as largely orthogonal to the traditional Big Five traits. In fact, the relative size of this honesty factor has led to the suggestion—based on cross-cultural research—that honesty may best be conceptualized as the sixth factor of personality (Ashton & Lee, 2001; Ashton, Lee, & Son, 2000; Ashton et al., 2004). Although we acknowledge that the Big Five conceptualizations were designed to capture the greatest individual variation with the fewest dimensions, we—like these researchers—believe social and personality psychologists may be best served by considering characteristics beyond the Big Five traits, trustworthiness in particular.

Closing Remarks

Questions about people's affiliation preferences are important ones, reaching to the heart of human sociality. In this article, we have presented a theoretically derived approach to understanding and predicting the person characteristics valued for members of interdependent groups and relationships. The outcome of our sociofunctional analysis, and the research it motivated, fills an important void in the extant psychological literature, much of which has heretofore underestimated the across-domain priority of trustworthiness and cooperativeness and overestimated the across-domain priority of other traits. In all, we expect the implications of our approach to enhance understanding of the often difficult social choices people make each day within a wide range of domains, including friendship, romance, education, and work.

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