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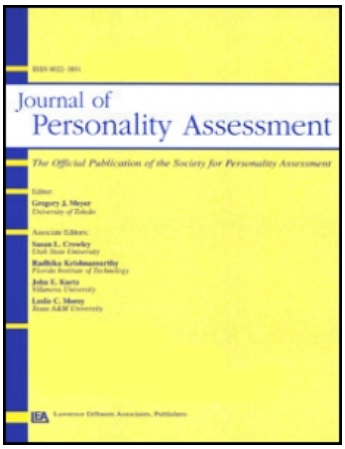

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The Individual and Group Loyalty Scales (IGLS): Construction and Preliminary Validation

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The Individual and Group Loyalty Scales (IGLS): Construction and Preliminary Validation

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Trait loyalty has received virtually no attention from researchers; consequently, the basic goal of this research was to create a measure of interpersonal loyalty. Principal factor analyses of an initial pool of items revealed 2 factors: Individual Loyalty (e.g., "I stand by my friends, even when they make mistakes") and Group Loyalty (e.g., "I am loyal to my country"). Analyses of a revised item pool identified the same 2 factors in a second sample. Scales based on these factors were internally consistent and only moderately related to one another. Additional analyses indicated that both scales (a) were stable over time; (b) showed moderate to strong self-peer agreement; (c) positively correlated with conscientiousness, agreeableness, altruism, and positive emotionality; and (d) negatively related to an avoidant attachment style. However, these associations all were moderate in magnitude (in fact, none was as high as |.40|), indicating that the Individual and Group Loyalty Scales tap unique variance that is not captured by existing instruments.

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Loyalty is one of the principal ties that bind people together, whether it is in a romantic relationship, a platonic friendship, or an organizational framework. Interpersonal loyalty can influence an individual's relationships in a very crucial way. The fact that betrayal is a topic that has garnered great interest in the relationship literature (for a review, see Jones & Burdette, 1994) pays tribute to the fact that interpersonal loyalty is a quality on which people place a high value. Consequently, attempts should be made to study the presence of this desired quality and determine what makes a loyal person.

One can be loyal to a partner or to friends. One also can be loyal to an employer or to an organization; one can even be loyal to a product or brand. Organizational and product/brand loyalties have been researched extensively in the organizational and managerial literature (e.g., Rust, 1998), but interpersonal loyalty (i.e., loyalty to a partner or to friends) has been studied less frequently. Moreover, few researchers have taken the approach that loyalty of this type could be considered a dispositional construct in which individual differences consistently emerge across different roles and contexts. One who is loyal to an employer may also be the type of person who is loyal to a lover, or, more specifically, one who is loyal to a lover may be the same type of person who is loyal to a friend. However, some types of loyalty may be examples of entirely separate constructs. Loyalty to an employer might entail something much different from loyalty to a lover, but loyalty to a lover may look very similar to loyalty in the context of a friendship. These possibilities could be tested if there existed a personality measure of interpersonal loyalty. In current literature, there is much said about commitment to a partner in a romantic relationship (Johnson, 1999; Rusbult, Olsen, Davis, & Hannon, 2001), but this topic is narrower than the current treatment of loyalty. Although there are some scales of consumer and brand loyalty (e.g., Ellis, 2001) and some measures of group loyalty (James & Cropanzano, 1994; Scott, 1965) in the literature, no adequate measures of interpersonal loyalty currently exist.

We followed Clark and Watson's (1995) general theoretical model for scale construction, which is itself based on Loveinger's (1957) earlier monograph. The first step in this process is defining the construct. Interpersonal loyalty can be broadly defined as an individual's self-imposed sense of enduring obligation to support, defend, and believe in the value of a relationship or involvement with a target. Although this definition may still be lacking some specificity, it differentiates interpersonal loyalty from other topics such as consumer loyalty, and it does so without using specific behavioral examples in the definition. This definition drove the creation of the initial item pool in these studies.

However, this is only one definition. Although loyalty has been largely neglected by personality and social psychologists, a few researchers have made efforts to study loyalty as it relates to interpersonal relationships. In the following section, we highlight some alternative conceptualizations of interpersonal loyalty that help to place this research into a broader context.

ALTERNATIVE MODELS OF LOYALTY

A Dialectical Perspective

Baxter et al. (1997) examined competing loyalties in a relationship context, utilizing the larger conceptual framework of a dialectical perspective. This perspective assumes that each time an individual fulfills a loyalty to one person or group, he or she engages in an act of disloyalty on another front. Baxter et al. (1997) thus defined loyalty as "a social experience in which relationship parties face a cross-current of competing and oppositional loyalty demands" (p. 655). A further implication of this view is that loyalty need not be only to sources outside of the self: One also can be loyal to one's self. If one accepts this idea of loyalty, it helps to differentiate it from other traits such as dependability, generosity, and altruism.

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Baxter et al. (1997) reported a study in which participants provided written accounts of competing loyalties in a friendship and a romantic relationship. For example, one individual faced the decision of choosing between the possibility of going to dinner with his or her partner versus engaging in an activity with a group of friends.

To accept this dialectical perspective, one has to consider loyalty as singularly embedded in social networks and defined only through dialogue with its opposite. Within this framework, it is very difficult to conceive that interpersonal loyalty is a trait. Interestingly, however, Baxter et al. (1997) suggested that state and trait conceptualizations of loyalty do merit some investigation but that these individual tendencies would be incomplete if not also viewed in terms of social situations and pressures.

Exit, Voice, Loyalty, Neglect

Another approach involves the exit-voice-loyalty-neglect (EVLN) model of responses to dissatisfying events (e.g., Rusbult, Zembrodt, & Gunn, 1982), based on the work of Hirschman (1970). In this model, each type of behavior is characterized by its level of activity (active vs. passive) and whether it is constructive or destructive to the relationship. Voice is an active, constructive response. Loyalty is a passive, constructive response. Exit and neglect are both destructive and are active and passive, respectively. Research has shown that exit and neglect are harmful, whereas voice is generally helpful; in contrast, the effect of loyal behaviors on the relationship remains unclear (Rusbult, Johnson, & Morrow, 1986a; Rusbult et al., 1982).

In this regard, Drigotas, Whitney and Rusbult (1995) conducted a study to determine the effectiveness of loyalty in response to dissatisfying events. Participants consisted of 28 heterosexual couples who were asked to document, in diary form, instances in which they felt dissatisfied with their partner over a 2-week period (Drigotas et al., 1995). These records were then analyzed to determine (a) which type of behavior an individual expresses in response to dissatisfying events in the relationship and (b) which type of behavior yields more positive results for the relationship. The results indicated that although loyalty is more effective than exit or neglect in terms of perceived impact on the relationship, voice is more constructive than loyalty in accordance with previous data (Drigotas et al., 1995; Rusbult, Johnson, & Morrow, 1986b). The researchers have referred to this phenomenon as the "peculiarity of loyalty" due to the fact that it is the only one of the four behavior classifications not to yield the expected results. The EVLN typology would suggest that loyalty should be more effective due to the fact that it is a constructive class of behavior. Drigotas et al. (1995) suggested that the passive nature of the loyalty response may render it less visible to partners and thus less effective in terms of positive relationship impact.

Minimal Groups

Another approach has been to study loyalty in artificially created groups. Moreland and McMinn (1999) brought participants in to the laboratory and separated them into two groups of six to perform a task. On completion of this initial task, the groups were divided further into groups of three. These smaller groups then performed another task—creating a poster for university recruitment. They were also asked to rate a poster from another group. After the posters had been completed and rated, each group received the same bogus negative rating generated by the experimenters. In this case, loyalty is defined as a certain set of behaviors showing favor toward a group of origin. For example, if a group were in the in-group exchange condition, the behavior would be considered loyal if the group rated the poster of their exchange partners in a positive way.

Overall, Moreland and McMinn (1999) found that participants made more generous evaluations of posters from other groups if these other groups were comprised of former in-group members rather than out-group members. Moreland and McMinn also found that groups were more distressed when faced with harsh criticism from former in-group members relative to former out-group members.

Moreland and McMinn (1999) recognized that loyalty effects in their study may have had more to do with the formation of individual bonds, thus leaving the door open for a different kind of bias—one of a more interpersonal and individual nature—as opposed to group loyalty. Although direct evidence of these interpersonal biases was not actually observed in the study, this alternative account of loyalty effects could not be entirely ruled out and warrants further research into the nature of both individual and group loyalty.

Toward a Resolution

The preceding review illustrates two limitations of current literature on interpersonal loyalty. First, researchers need to develop an understanding of the overlap and divergences of each unique operationalization of loyalty. Each of the highlighted approaches have defined loyalty differently. One emphasized the role of social experience and differential affiliations in defining loyalty. A second approach defined loyalty as a passive, optimistic response in the face of conflict. The third approach examined loyalty as a perceived kinship with former group members. Clearly, these researchers are not all discussing the same topic, nor would they assert that they are. Our research is an attempt to conceptualize interpersonal loyalty while taking into account these various existing models of loyalty.

Second, no one has investigated the possibility that interpersonal loyalty is a dispositional construct. All of the definitions presented thus far have shared the view that social situations and pressures play an important role in defining loyalty. However, our contention is that one cannot view loyalty as an exclusively social phenomenon without also considering the pattern of tendencies within an individual.

These Studies

The goal of these studies is to demonstrate that interpersonal loyalty can be conceptualized as a valid and stable dispositional construct with a coherent factorial structure. If the construct exists, then factor analysis should yield scales comprised of items faithful to the definition of interpersonal loyalty described earlier. This, of course, depends on proper item generation, which constitutes a crucial second step of the scale development process (Clark & Watson, 1995; Loveinger, 1957). Moreover, these scales should be reliable and replicable. In Studies 1 and 2, we addressed basic structural issues. In Study 3, we attempted to establish the temporal stability of these scales. In Study 4, we evaluated whether interpersonal loyalty is redundant with other constructs (i.e., the issue of discriminant validity) and examined how it relates to existing constructs (i.e., the issue of

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convergent validity). Efforts to establish convergent validity center on the loyalty scales' relationships with hypothetically similar constructs such as betrayal, altruism, and dependency. Efforts to establish discriminant validity center on the loyalty scales' relationships with hypothetically dissimilar constructs such as neuroticism, negative affect, and dominance–submissiveness. Finally, In Study 5, we examined perceptions of interpersonal loyalty among married couples.

STUDY 1

This study had two basic goals. First, we constructed a pool of loyalty items and administered them to a large group of respondents; these data produced a preliminary measure of interpersonal loyalty. Second, we examined the association between these preliminary scales and a measure of the prominent five-factor model of personality (Goldberg, 1990; John & Srivastava, 1999).

Method

Participants. Participants consisted of 589 undergraduates from an introductory psychology course at the University of Iowa. Individuals participated in partial fulfillment of a course research requirement.

Procedure. Using the definition presented earlier, we initially generated a pool of 36 loyalty items. We included items that tapped loyalty to friends and family as well as more abstract group concepts such as a school or team. We then presented this pool, along with our conceptual definition, to a panel of 12 researchers with expertise in personality assessment. Over the course of two meetings, the panel scrutinized the 36 items in an effort to ensure comprehensiveness and clarify item content. Several items were reworded on the basis of their suggestions, and we ultimately expanded the item pool to include some additional behavioral-type items (e.g., "I would consider doing something unethical to help out a friend") and family-oriented items (e.g., "I would remain loyal to members of my family, even if they did things I thought were wrong") to accompany the original set of largely attitudinal (e.g., "People who focus on old friendships are living in the past") and cognitive items (e.g., "I consider myself to be a loyal person"). We also included items that tapped other types of loyalty (e.g., "When I find a product I like, I stick with it"). The final pool consisted of 46 items.

Measures. A 75-item questionnaire, composed of the 46 loyalty items and 29 interspersed filler items (test items from another scale development project), was included in a group testing session. Participants used a 5-point response scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) to answer a broad range of items assessing attitudinal, behavioral, and cognitive aspects of interpersonal loyalty.

In addition, the Big Five Inventory (BFI; John & Srivastava, 1999)—a factor analytically derived 44-item measure that assesses global personality across five broad trait dimensions—was included in the group testing session. The five-factor model is currently a popular approach for assessing general personality at the global level (Digman, 1996). Participants used a 5-point rating scale ranging from 1 (*disagree strongly*) to 5 (*strongly agree*) to respond to statements tapping Neuroticism (8 items), Extraversion (8 items), Agreeableness (9 items), Conscientiousness (9 items), and Openness (10 items). Coefficient alphas for these scales from this sample ranged from .78 to .83.

Results and Discussion

We performed a principal factor analysis (with squared multiple correlations in the diagonal) of the 46 loyalty items. The scree test (Cattell, 1966) suggested a two-factor solution (the eigenvalues of the first 8 unrotated factors were 8.69, 1.96, 1.51, 1.31, 1.09, 0.82, 0.76, and 0.69). However, a parallel analysis (O'Connor, 2000) suggested that a maximum of three factors potentially could be extracted from our data (the third unrotated eigenvalue in the random analysis was 1.48 vs. 1.51 for the corresponding value from our data). We therefore examined both the two-factor and three-factor solutions; all factors were rotated using varimax. In the three-factor solution, the third factor was an amalgamation of preference for older friends to newer ones and reactance to betrayal; thus, this dimension was conceptually similar to Factor 1 but less interpretable. We therefore decided to retain only two factors. The first and third columns of Table 1 provide a matrix of the rotated factor loadings for the 17 items that were included in the initial versions of our loyalty scales. Overall, 16 items had loadings of .40 or greater on the first factor, which reflects individual differences in interpersonal loyalty. We eliminated three items that had relatively strong loadings (i.e., .30 or greater) on both factors; a fourth item ("hard to refuse request from a friend") was dropped because its content was largely redundant with that contained in other, retained items (specifically, "come to the aid of a friend" and "sacrifice time and money for a friend"). We summed the 12 remaining items to create an Individual Loyalty Scale.

Eight items had loadings greater than .40 on the second factor. The five items with the strongest loadings (all were .50 or greater) appeared to define a common construct of loyalty to

TABLE 1.—Rotated factor pattern from Studies 1 and 2.

	Factor 1 Loading		Factor 2 Loading	
Abbreviated Item Content	Study 1	Study 2	Study 1	Study 2
Come to the aid of a friend[a]	.74	.70	.18	.16
Sacrifice time/money for a friend[a]	.68	.67	.15	.07
Consider myself a loyal person[a]	.63	.64	.18	.13
Concerned about well-being of friends[a]	.67	.63	.10	.11
Keep promises to a friend[a]	.62	.62	.09	.11
People can always count on me[a]	.53	.61	.15	.17
Defend friends against criticism[a]	.60	.57	.15	.13
Would never turn back on a friend[a]	.54	.53	.19	.16
Stand by friends, despite mistakes[a]	.61	.52	.23	.14
Value old friends more than new[a]	.47	.46	.01	.09
Be a friend to someone despite behavior[a]	.48	.38	.18	.06
Keep in touch with old friends[a]	.52	.38	.16	.22
Admire patriotism[b]	.17	.12	.55	.81
Respect the flag[b]	*NA*	.19	*NA*	.79
Don't criticize our country[b]	.05	.07	.57	.77
Don't badmouth my country[b]	*NA*	.02	*NA*	.71
Loyal to country[b]	.20	.15	.50	.71
Admire school spirit[b]	.07	.20	.60	.55
Loyal to school[b]	*NA*	.16	*NA*	.50
Am a team player[b]	.28	.32	.50	.38

Note. Study 1 $N = 589$. Study 2 $N = 782$. *NA* denotes items that were not included in Study 1.

[a] Items included in Individual Loyalty Scale. [b] Items included in Group Loyalty Scale.

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TABLE 2.—Correlations between loyalty and Big Five traits: Study 1.

Scale	Individual Loyalty	Group Loyalty
Neuroticism	–.03	–.03
Extraversion	.20*	.21*
Openness	.11*	–.04
Agreeableness	.37*	.22*
Conscientiousness	.22*	.13*

Note. $N = 564$.
* $p < .01$.

broader groups (e.g., school, country). Accordingly, we summed scores on these five items to create a Group Loyalty Scale. Jointly, these two measures comprise the initial version of the Individual and Group Loyalty Scales (IGLS).

The internal consistency reliability (coefficient alpha) for the Individual Loyalty Scale was .87; the corresponding value for the Group Loyalty Scale was .76. The coefficient alpha for the Individual Loyalty Scale was judged to be adequate. The slightly lower reliability of the Group Loyalty Scale, combined with its content being dominated by items assessing patriotism, indicated the desirability of writing and testing additional items; this, then, was a primary goal of Study 2. Finally, it is noteworthy that the two scales were moderately correlated ($r = .38$) with one another. This moderate association indicates that these are significantly interrelated and define distinctive aspects of a common higher order construct.

Table 2 presents correlations between the IGLS and the BFI scales. The most noteworthy aspect of these data is that all of these correlations are low to moderate in magnitude: Only one coefficient exceeds |.25|, and the highest correlation is only .37 (Agreeableness with Individual Loyalty). Thus, it is clear that the IGLS scales capture variance beyond that attributable to these five broad personality traits. In terms of specific associations, both loyalty scales had significant positive correlations with Agreeableness, Extraversion, and Conscientiousness; Individual Loyalty also showed a weak yet significant relationship with Openness. Not surprisingly, these data indicate that loyalty generally is a positive, socially desirable attribute. Loyal individuals tend to be agreeable, outgoing, and responsible.

STUDY 2

In Study 2, we had two basic aims. First, to create a finalized version of the Group Loyalty Scale, we developed and administered a revised item pool to a new sample of participants. Second, this new round of data collection allowed us to examine the replicability of the factor structure defined by these items.

Method

Participants. Participants consisted of 782 undergraduates from an introductory psychology course at the University of Iowa. Individuals participated in partial fulfillment of a course research requirement.

Measure. Participants responded to a modified version of the 75-item measure included in Study 1. The questionnaire again included 46 loyalty items: 38 of these were retained from Study 1, whereas 8 items were newly written to enhance the assessment of the group loyalty dimension.

Results and Discussion

Structural Analyses

Exploratory Factor Analysis: As in Study 1, we conducted a principal factor analysis with varimax rotation. The Study 2 data yielded a very similar factor pattern to Study 1. In this case, however, the scree test and a parallel analysis both suggested that a maximum of three factors could be extracted from our data (the eigenvalues of the first 8 unrotated factors were 9.03, 2.98, 1.44, 1.22, 0.97, 0.75, 0.69, and 0.61; the third unrotated eigenvalue in the random analysis was 1.41 vs. 1.44 for the corresponding value from our data). However, this third factor again was psychologically uninterpretable, and it had only one item ("There are no friends like old friends") in common with the third factor from the Study 1 data. Thus, we again decided to retain only two factors. Factor 1 was defined by the same 12 markers as the first factor in the original sample. Factor 2 was now defined by eight items—the five retained items from Study 1 plus three new markers. Thus, these results closely resemble those from Study 1 except that Factor 2 had expanded slightly.

These findings led to the construction of the revised 20-item IGLS (see the Appendix for complete item listing). The second and fourth columns of Table 1 provide the rotated factor pattern in the Study 2 sample based on an additional factor analysis of these 20 retained items. The Individual Loyalty Scale again showed an excellent coefficient alpha (.85) in this new sample. The expanded, 8-item Group Loyalty Scale now had an alpha reliability of .87. It is noteworthy that the correlation between the scales ($r = .38$) was identical to that of Study 1, further suggesting the replicability of the constructs defined by these factors.

Confirmatory Factor Analyses: To further examine the underlying factor structure, we conducted a confirmatory factor analysis using the 20 loyalty items as markers of the two underlying factors (the 12 Individual Loyalty items defined Factor 1, and the 8 Group Loyalty items defined Factor 2); we allowed the factors to be correlated. For comparative purposes, we tested a model positing only one underlying factor. We conducted the analyses using EQS (Bentler & Wu, 1995), and we tested the models using a correlation matrix and the maximum-likelihood estimation method. We considered six different fit indexes in evaluating the models: the overall model chi-square, the Bentler–Bonett normed fit index (NFI), the comparative fit index (CFI), the goodness-of-fit index (GFI), the standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA; for discussions of fit indexes, see Finch & West, 1997; Hu & Bentler, 1998, 1999). There are no strict guidelines for evaluating these fit indexes, but conventional benchmarks are that values of .90 or greater for NFI, CFI, and GFI and .10 or less for SRMR and RMSEA indicate good model fit.

Table 3 provides the fit indexes for the analyzed models. Although the absolute and comparative fit measures from the two-factor model fall just short of the arbitrary cutoff points, they do approach these values, ranging from .845 to .881. The absolute misfit indexes (SRMR and RMSEA), however, indicate good model fit (.065 and .076, respectively). As Table 3 indicates,

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TABLE 3.—Fit indexes for the two-factor model in the confirmatory factory analysis.

Model	*df*		χ^2	NFI	CFI	GFI	SRMR
RMSEA							
1-Factor	170	2659.21	.557	.571	.604	.123	.137
2-Factor	169	927.74	.845	.869	.881	.065	.076

Note. $N = 782$. NFI = normed fit index; CFI = comparative fit index; GFI = goodness-of-fit index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

the single-factor model was a very poor fit. It is important to note, moreover, that the two-factor model fit the data significantly better than the one-factor model, χ^2 difference (1, $N = 782$) = 1731.47, $p < .001$. Table 4 provides the abbreviated item content and factor loadings from the two-factor model.

Descriptive statistics. The mean score for the 12-item Individual Loyalty Scale was 50.7 in this sample, with a standard deviation of 5.3. The mean score for the 8-item Group Loyalty scale was 29.7, with a standard deviation of 5.5. The mean item-level responses (on our 1–5 response scale) were 4.2 and 3.7 for the Individual Loyalty and Group Loyalty items, respectively. High mean values of this type are typically found with positive, socially desirable traits.

STUDY 3

In Studies 1 and 2, we created distinct, internally consistent measures of individual and group loyalty; we also demonstrated the replicability of the factor structure within this domain. However, we have not yet established that our scales represent valid measures of trait loyalty. In this regard, temporal stability is a basic assumption underlying any trait construct. Accordingly, the goal of Study 3 was to investigate the retest reliability of the IGLS.

TABLE 4.—Factor loadings from the confirmatory factor analysis.

Item	Abbreviated Content	Factor 1 Loading	Factor 2 Loading
1	Come to the aid of a friend	.72	
2	Sacrifice time/money for a friend	.68	
3	Consider myself a loyal person	.64	
4	Concerned about well-being of friends	.66	
5	Keep promises to a friend	.62	
6	Stand by friends, despite mistakes	.54	
7	Defend friends against criticism	.59	
8	Would never turn back on a friend	.54	
9	People can always count on me	.63	
10	Keep in touch with old friends	.42	
11	Be a friend to someone despite behavior	.38	
12	Value old friends more than new	.47	
13	Admire school spirit		.55
14	Don't criticize our country		.76
15	Admire patriotism		.85
16	Am a team player		.40
17	Loyal to country		.74
18	Respect the flag		.84
19	Loyal to school		.50
20	Don't badmouth my country		.69

Note. $N = 782$.

TABLE 5.—Temporal stability of the IGLS.

	Individual Loyalty		Group Loyalty	
Scale	Time 1	Time 2	Time 1	Time 2
Individual Loyalty				
Time 1				
Time 2	.71			
Group Loyalty				
Time 1	.42	.32		
Time 2	.37	.39	.84	

Note. $N = 201$. IGLS = Individual and Group Loyalty Scales. All correlations are significant at $p < .05$. Retest correlations are underlined.

Method

Participants and procedure. Participants were 201 undergraduates enrolled in various psychology courses at the University of Iowa. Individuals participated either (a) in partial fulfillment of a course research requirement or (b) for extra course credit.

Participants completed a questionnaire containing the 20 IGLS items at the beginning of the semester. They subsequently were retested on these same items later in the term. The retest intervals ranged from 5 weeks to 11 weeks, with a median time span of approximately 2 months.

Results and Discussion

Table 5 reports correlations between the IGLS scores at both assessments. Two aspects of these data are noteworthy. First, as in previous studies, the Individual and Group Loyalty scales were moderately correlated at both Time 1 and Time 2; these results again indicate that they assess distinctive aspects of a common underlying construct. Second, and more important, both scales were strongly stable over time. These strong retest reliability correlations augment the construct validity of the scales and support the argument that they represent dispositional measures of trait loyalty.

STUDY 4

Studies 1 through 3 have established the internal consistency and retest reliability of the IGLS. Consequently, we shifted our attention to issues of validity in Study 4. Specifically, in Study 4, we examined the convergent and discriminant validity of the scales. The IGLS was included in a battery of instruments representing different personality domains in an effort to examine the relationship between loyalty and other existing measures of personality. We included two measures of global personality traits to determine whether interpersonal loyalty could be subsumed within a broader existing domain of personality. First, the inclusion of the BFI allowed us to replicate the results from Study 1. On the basis of these earlier results, we expected both IGLS measures to be positively correlated with Agreeableness, Extraversion, and Conscientiousness. Second, our participants completed the revised Interpersonal Adjective Scales (Wiggins, Trapnell, & Phillips, 1988), which measure the interpersonal circumplex. This two-dimensional scheme has provided an influential conceptual/assessment framework for interpersonal research for several decades (for a discussion, see Wiggins & Pincus, 2002). Given the frankly interpersonal nature of our

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loyalty scales, it seemed especially important to establish their position within this broader framework.

For similar reasons, we included a variety of interpersonal constructs in our battery including measures of altruism, betrayal, jealousy, dependency, and adult attachment. Altruism should be moderately related to interpersonal loyalty in that they both reflect a certain degree of selflessness. At the same time, however, the two constructs should be separable because loyalty entails more specificity than altruism: Loyal individuals perform selfless acts for individuals and groups who have special significance to them, whereas altruistic individuals help others more indiscriminately. Conversely, loyalty should be negatively related to betrayal: Obviously, loyal individuals should be less likely to betray others.

Relations with jealousy and dependency are more difficult to predict. On one hand, loyal individuals may be prone to jealousy given that they place a high value on close relational bonds; put differently, such individuals may be somewhat possessive of those to whom they profess loyalty. Similar considerations might lead one to predict that loyal individuals are more dependent on others in their decision making. On the other hand, because of their agreeableness and other positive attributes (see Study 1), loyal individuals might feel relatively secure and comfortable in their relationships and, therefore, disinclined to either jealousy or dependency.

We were also interested in the relationship between attachment style and loyalty. The correlation between interpersonal loyalty and attachment may facilitate our understanding of the origins of loyalty. Because adult attachment is viewed as an extension of early relational dynamics (e.g., Brennan, Clark, & Shaver, 1998), a strong correlation with the IGLS could suggest that loyalty also finds its roots in early relationship experience.

Finally, we included a comprehensive measure of trait affectivity to examine the emotional correlates of interpersonal loyalty. In this regard, previous studies have established strong and systematic correlations between Extraversion and various types of positive emotionality (Watson & Clark, 1992; Watson, Weise, Vaidya, & Tellegen, 1999). In Study 1, we found that both IGLS measures were moderately positively correlated with Extraversion. Consequently, we expected that individuals high in interpersonal loyalty would report somewhat higher levels of positive affectivity.

Method

Participants and procedure. Participants consisted of 202 undergraduates from an introductory psychology course at the University of Iowa. Individuals participated in partial fulfillment of a course research requirement, and assessment sessions lasted approximately 1 hr.

Measures. The assessment battery contained the final, revised, 20-item version of the IGLS as well as the 44-item BFI (described earlier in Study 1). In addition, participants completed the revised Interpersonal Adjective Scales (IAS–R; Wiggins et al., 1988). The IAS–R is a list of 64 personality adjectives to which the participant typically responds using an 8-point rating scale. For this study, however, participants responded using an alternate 5-point rating scale ranging from 1 (*very inaccurate description of me*) to 5 (*very accurate description of me*). The IAS–R assesses a circumplex structure defined by love and status dimensions. There are eight separate eight-item scales: Assured-Dominant (e.g., *self-assured, self-confident*), Arrogant-Calculating (e.g., *cocky, crafty*), Cold-Hearted (e.g., *ruthless, iron-hearted*), Aloof-Introverted (e.g., *uncheery, unneighborly*), Unassured-Submissive (e.g., *timid, bashful*), Unassuming-Ingenuous (e.g., *unargumentative, undemanding*), Warm-Agreeable (e.g., *softhearted, accommodating*), and Gregarious-Extraverted (e.g., *cheerful, friendly*). Coefficient alphas in our sample ranged from .62 (Unassuming-Ingenuous) to .84 (Warm-Agreeable).

The Self-Report Altruism Scale (SRAS; Rushton, Chrisjohn, & Fekken, 1981) is a 20-item measure that asks participants to rate the frequency (*never, once, more than once, often, very often*) with which they have performed various altruistic acts. The coefficient alpha in this study was .84. The SRAS has shown convergent validity with other measures of altruism including peer ratings of altruistic behavior (Rushton et al., 1981).

The Interpersonal Betrayal Scale (IBS; Jones & Burdette, 1994) asks participants to rate the relative frequency with which they have engaged in 15 different acts of betrayal ranging from 1 (*I have never done this*) to 5 (*I have done this many times*). Jones and Burdette found IBS scores to be inversely correlated with measures of the respondents' moral standards, supporting its construct validity. Scores on the IBS also have been positively correlated with indexes of personal and relational problems as well as measures of shame, guilt, suspiciousness, resentment, and resistance to authority. The IBS had a coefficient alpha of .83 in this sample.

The Chronic Jealousy Scale (CJS; White, 1981) is a six-item measure surveying general self-perceptions of jealousy in romantic relationships. White reported a coefficient alpha of .81; the corresponding value in this study was .86. The CJS has shown a strong positive correlation with relationship jealousy ($r = .72$).

The Dependency scale of the Schedule for Nonadaptive and Adaptive Personality (Clark, 1993) consists of 18 true–false statements that tap an individual's sense of self-sufficiency. High scorers on the dependency scale look for external direction and approval for their actions and decisions; low scorers are more self-reliant. Scores on the scale correlate moderately with measures of neuroticism and negative affectivity. Coefficient alphas for the dependency scale have ranged from .75 to .86 in previous research (Clark, 1993); in this sample, coefficient alpha was .81.

The Experiences in Close Relationships Questionnaire (Brennan et al., 1998) is a factor-analytically derived 36-item measure that asks participants to rate the extent to which they agree or disagree ranging from 1 (*Disagree Strongly*) to 7 (*Agree Strongly*) with statements describing their emotionally close relationships. This measure consists of two independent 18-item scales that measure the avoidance and anxiety dimensions of adult attachment. This is one of the most widely used and extensively validated instruments in the assessment of adult attachment. Coefficient alphas typically are in the .90s; in this sample, coefficient alphas were .91 and .94 for the Avoidance and Anxiety scales, respectively.

The Expanded Form of the Positive and Negative Affect Schedule (PANAS–X; Watson & Clark, 1994, 1997) is a factor-analytically derived 60-item measure that assesses both global and specific affectivity. Participants respond to mood adjectives using a 5-point rating scale ranging from 1 (*very slightly*) to 5 (*extremely*), rating the extent to which each adjective describes the way they generally feel. The PANAS–X consists of 10-item

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scales measuring general Positive Affect (e.g., *attentive, strong, inspired*) and Negative Affect (e.g., *irritable, upset*). In addition, there are four scales that measure specific negative emotions: Fear (6 items; e.g., *scared, nervous*), Sadness (5 items; e.g., *blue, lonely*), Guilt (6 items; e.g., *disgusted with self, angry at self*), and Hostility (6 items; e.g., *angry, loathing*). There are also three scales that assess specific positive emotions: Joviality (8 items; e.g., *happy, enthusiastic*), Self-Assurance (6 items; e.g., *bold, fearless*), and Attentiveness (4 items; e.g., *alert, concentrating*). Finally, there are four scales that are not as strongly and consistently related to the higher order Negative Affect and Positive Affect factors: Shyness (4 items; e.g., *bashful, timid*), Fatigue (4 items; e.g., *sluggish, drowsy*), Serenity (3 items; e.g., *calm, relaxed*), and Surprise (3 items; e.g., *amazed, astonished*). We do not report data from these last four scales here. Coefficient alphas for the PANAS–X scales from this sample ranged from .66 (Attentiveness) to .91 (Joviality).

Results and Discussion

IGLS characteristics. Coefficient alphas for the IGLS were .82 and .85 for the Individual and Group Loyalty scales, respectively. Consistent with previous studies, scores on the two scales correlated .29 with one another. Thus, the IGLS scales again were found to be internally consistent and moderately positively related.

Correlations between interpersonal loyalty and broad personality measures. Table 6 reports correlations between the IGLS and the complete battery of other personality constructs. The BFI results largely replicate those obtained in Study 1. Once again, all of the coefficients were low to moderate in magnitude (only two exceeded |.25|, and none were as high as |.40|), establishing that the IGLS scales tap variance not readily obtainable from the Big Five. Furthermore, as in Study 1, both loyalty scales were (a) moderately positively correlated with both Agreeableness and Conscientiousness and (b) unrelated to Neuroticism. In addition, the IGLS scales again were positively related to Extraversion, although the correlations were lower in this sample and failed to reach significance. Finally, Openness yielded results that were opposite to those reported in Study 1: Whereas it correlated only with Individual Loyalty in the earlier sample, it was only related to Group Loyalty (negatively) in these data.

Correlations with the IAS–R also were low to moderate in magnitude; only 3 of the 16 coefficients exceeded |.30|, and none were as high as |.40|. These results further establish the discriminant validity of the IGLS and indicate that these loyalty scales tap some distinctive interpersonal variance. In terms of more specific findings, the Individual Loyalty Scale clearly assesses variance that is much more relevant to the love/warmth dimension than to the status/dominance dimension of the interpersonal circumplex. These results are consistent with those obtained with the BFI and indicate that high scorers on Individual Loyalty tend to be warm and agreeable individuals.

The findings for the IGLS Group Loyalty Scale are more complex, however. Its strongest and most consistent correlations are along the axis defined by extraversion versus introversion, suggesting that high scorers on this scale are outgoing and gregarious. However, Group Loyalty correlated only .11 with BFI Extraversion. These complex and contradictory results suggest that Group Loyalty actually is associated with specific item content rather than the broader trait of extraversion. It therefore would be informative to examine these relations more specifically at the lower order, facet level of personality.

TABLE 6.—Correlations between loyalty and personality measures: Study 4.

Scale	Individual Loyalty	Group Loyalty
Personality		
BFI		
Neuroticism	–.04	–.01
Extraversion	.14*	.11
Openness	.00	–.19*
Agreeableness	.36*	.20*
Conscientiousness	.23*	.33*
IAS–R		
Assured-Dominant	.05	.13
Arrogant-Calculating	–.19*	–.08
Cold-Hearted	–.26*	–.13
Aloof-Introverted	–.27*	–.31*
Unassured-Submissive	–.11	–.12
Unassuming-Ingenuous	–.13	–.11
Warm-Agreeable	.37*	.24*
Gregarious-Extraverted	.31*	.21*
Interpersonal constructs		
SRAS (Altruism)	.32*	.26*
IBS (Betrayal)	–.12	.00
CJS (Jealousy)	.04	.19*
SNAP Dependency	–.04	–.03
Adult attachment		
ECR Anxiety	.03	.10
ECR Avoidance	–.20*	–.18*
Affectivity		
Negative Affectivity		
General Negative Affect	.00	–.06
Fear	.02	–.04
Sadness	.00	–.17*
Guilt	.00	–.12
Hostility	–.07	–.09
Positive Affectivity		
General Positive Affect	.26*	.33*
Joviality	.21*	.22*
Self-Assurance	.11	.15*
Attentiveness	.22*	.30*

Note. $N = 202$. BFI = Big Five Inventory; IAS–R = revised Interpersonal Adjective Scales; SRAS = Self-Report Altruism Scale; IBS = Interpersonal Betrayal Scale; CJS = Chronic Jealousy Scale; SNAP = Schedule for Nonadaptive and Adaptive Personality; ECR = Experiences in Close Relationships Questionnaire.
* $p < .05$.

To examine these relations further, we conducted the more detailed and extensive analyses described by Gurtman (1992) and Gurtman and Pincus (2003). It is noteworthy that these analyses revealed that Individual Loyalty (located at an angular displacement of 50.2°) and Group Loyalty (located at 76.9°) both fell in the upper right-hand quadrant of the circumplex. Individual Loyalty had an amplitude of .22 and an elevation of –.03; Group Loyalty had corresponding values of .62 and –.02, respectively. We note that Group Loyalty's greater amplitude (.62 vs. .22 for Individual Loyalty) indicates that it shows a more differentiated pattern with the octants of the interpersonal circumplex.

Interpersonal loyalty and other interpersonal constructs. As predicted, both IGLS scales were significantly positively correlated with the SRAS, indicating that loyal individuals also express altruistic, prosocial tendencies. However, the predicted negative association between loyalty and betrayal failed to emerge in these data. In fact, the IBS correlated only –.12 and

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.00 with Individual and Group Loyalty, respectively. A close inspection of the IBS item content indicates that it assesses a broad range of malevolent, antisocial characteristics including deception, disloyalty, aggression, and snooping on others. Consequently, these low correlations apparently reflect the fact that the IGLS and IBS assess very different content and, therefore, largely unrelated constructs.

We made no formal predictions regarding relations with either jealousy or dependency. Table 6 indicates that the only significant association with these variables was the positive correlation ($r = .19$) between Group Loyalty and the CJS. These results indicate that those who express loyalty to groups (e.g., their country) also show a mild tendency to become jealous more frequently in their romantic relationships.

Interpersonal loyalty and attachment. Both loyalty scales were significantly negatively correlated with the Avoidance dimension (rs = –.20 and –.18 with Individual and Group Loyalty, respectively) but were unrelated to scores on the Anxiety dimension (rs = .03 and .10, respectively). These results are consistent with other aspects of our data and again indicate that loyal individuals tend to be warm, gregarious, and agreeable. Further research will be needed to investigate this link with attachment style and to explore the possibility that the origins of loyalty lie in early relationship experiences; based on our data, however, it seems that individuals who are high in loyalty tend to be securely attached.

Interpersonal loyalty and affectivity. Consistent with our prediction, high scores on both loyalty scales were associated with greater positive emotionality. Specifically, the IGLS scales were moderately correlated with general Positive Affect (rs = .26 and .33 with Individual and Group Loyalty, respectively), Joviality (rs = .21 and .22, respectively), and Attentiveness (rs = .22 and .30, respectively). In contrast, the correlations with negative affectivity were much lower, ranging from only .02 to –.17; in particular, scores on the Individual Loyalty Scale were entirely unrelated to individual differences in negative emotionality (rs ranged from .02 to –.07). Overall, these data suggest that loyalty is broadly associated with the experience of greater positive affect.

Study 5

A notable limitation of the first 4 studies is that they are based entirely on self-report data collected from a college student population. Consequently, these results need to be extended in two significant ways. First, we must evaluate the level of agreement between self-ratings and other ratings on the IGLS. Given that interpersonal loyalty is hypothesized to be an observable trait involving behaviors that should be highly salient to others, one would expect that knowledgeable informants should be able to recognize it in others and, therefore, show at least a moderate level of congruence with the target's own self-ratings. Second, we needed to examine the properties of the IGLS scales in a nonstudent population. In Study 5, we achieved both of these goals.

Method

Participants and procedure. Participants were 191 recently married couples who participated in the Couples Assessment Project in the Iowa City/Cedar Rapids, Iowa, area. We located newlywed couples using community databases and contacted these couples via mail, inviting them to participate in an assessment session. Individuals received 45 dollars each in return for their participation. The mean age of the sample was 32.1 years (range = 20–90). The mean length of marriage at the time of assessment was 295.1 days (roughly 10 months), and marriage length ranged anywhere 37 days to 694 days (almost 2 years).

Couples participated in small-group sessions involving one to four couples. Both members of the dyad were required to be present at the session. On arrival, couples were given a dyadic identification number and physically separated from one another to ensure the independence and confidentiality of their responses. After this, they began a 2-hr assessment period, completing self and spouse ratings on a variety of measures including the IGLS. The spouse-rating form of the IGLS was identical in content to the self-rating forms except that gender appropriate, third-person pronouns were substituted for the first-person pronouns used in the self-report items (e.g., "I would never turn my back on a friend" became "She would never turn her back on a friend"). Thus, there were three versions of the IGLS in Study 5: a self-rating form, a wife-rating form, and a husband-rating form.

Results and Discussion

IGLS characteristics. The mean Individual Loyalty scores for self and spouse ratings were 50.9 ($SD = 5.3$) and 51.5 ($SD = 6.0$), respectively. The mean Group Loyalty scores for self-ratings and spouse ratings were 28.4 ($SD = 6.6$) and 27.1 ($SD = 6.4$), respectively. Coefficient alphas for the Individual Loyalty Scales were .83 for self-ratings and .88 for spouse ratings. Coefficient alphas for the Group Loyalty Scales were .89 for self-ratings and .89 for spouse ratings. The correlations between Individual Loyalty and Group Loyalty ($r = .23$ for self-ratings and .20 for spouse ratings) were somewhat lower than those observed in previous studies but were very similar to each other.

Perceptions of interpersonal loyalty. There were three primary questions that interested us among the self/spouse judgments of loyalty. First, do couples agree with each other as to each member's standing on the trait dimension? For example, if a husband claims to be high on interpersonal loyalty, does his wife tend to also rate him as loyal? Second, to what extent does one's self-judgment relate to one's judgment of his or her partner? If a wife is high on interpersonal loyalty, does she also view her husband as being high on interpersonal loyalty? Finally, is there similarity in the dyad? In other words, if a husband judges himself to be high on interpersonal loyalty, does his wife also judge herself high on interpersonal loyalty?

Self–Spouse Agreement: Self–spouse agreement is measured by correlating one member of the dyad's self-judgment with the other member of the dyad's judgment of that person. In our sample, self–spouse agreement was strong for group loyalty ($r = .64$, $p < .0001$) and moderate for individual loyalty ($r = .23$, $p < .0001$). This provides some evidence of convergent validity, especially for group loyalty. Average self–spouse correlations for the Big Five tend to be in the .50s to .60s (e.g., Watson, Hubbard, & Wiese, 2000).

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Perceived Similarity: Perceived or assumed similarity is measured by correlating one member of the dyad's self-rating with that same member's rating of his or her spouse. In general, when self–other agreement is high, assumed similarity is low (Beer & Watson, 2008; Watson et al., 2000). Perceived similarity correlations in this sample were .45 for individual loyalty and .66 for group loyalty. This indicates that for both types of interpersonal loyalty, members of the dyad perceive their partners to be similar to themselves. This is relatively unusual in personality perception, particularly in the case of group loyalty in which one sees both strong agreement and strong perceived similarity. One possibility is that spouses actually are similar to one another on this particular trait dimension, which is relatively uncommon (Eysenck, 1990).

Actual Similarity: Actual similarity is measured by correlating one spouse's self-judgment with the other spouse's self-rating. In our sample, actual similarity correlations were low for individual loyalty ($r = .09$, *ns*) but strong for group loyalty ($r = .51$, $p < .0001$), indicating that perhaps there is assortative mating for group loyalty. Thus, couples tend to resemble each other in terms of group loyalty but not individual loyalty.

General Discussion

These studies have filled a significant gap in the literature through the construction and validation of the IGLS, the first instrument specifically designed to assess trait loyalty. The IGLS contains two moderately correlated scales, one measuring interpersonal loyalty to individuals and the other assessing group loyalty. The IGLS scales were created through factor analyses of two large student samples. Our analyses consistently have demonstrated that the scales are highly reliable in terms of both (a) internal consistency and (b) temporal stability.

One primary goal of our research was to establish the convergent validity of these loyalty scales. Taken together, the evidence we have presented indicates that individual and group loyalty both are generally positive, socially desirable characteristics. Specifically, both scales were positively correlated with measures of conscientiousness, agreeableness, warmth, gregariousness, altruism, and various types of positive emotionality; moreover, both scales were negatively associated with interpersonal aloofness and an avoidant attachment style. In addition, however, we also saw some intriguing hints suggesting that loyalty is not simply an index of positive interpersonal behavior. Most notably, in Study 4, we found that our measure of Group Loyalty was significantly positively correlated with an index of romantic jealousy. This finding offers some support for our earlier assertion that loyal individuals may be somewhat possessive of those close to them. This is an intriguing idea that merits further attention in future research.

Our analyses also helped to establish the discriminant validity of the IGLS. In Study 4, we demonstrated that although the IGLS scales show low to moderate associations with many existing measures of personality, they are not strongly related to any of them and appear to tap unique variance that is not readily captured in any of the other traits assessed in these studies. The specificity of the IGLS is particularly noteworthy because we included a wide variety of interpersonally oriented measures in our Study 4 assessment battery including indicators of altruism, betrayal, jealousy, dependency, adult attachment, and the interpersonal circumplex. Accordingly, given the absence of any strong correlations, it seems plausible to assert that interpersonal loyalty is indeed a unique construct. Particularly important is the fact that trait loyalty was only moderately related to altruism, suggesting that interpersonal loyalty is not simply another manifestation of prosocial behavior. Rather, consistent with our earlier definition of the construct, interpersonal loyalty involves a positive personal bias: Loyal individuals are discriminating in their prosocial tendencies and only behave selflessly toward others with special significance to them. Being a loyal individual is different from being a "nice" or altruistic individual. One can be loyal without being altruistic and vice versa.

The Study 5 results are somewhat puzzling at first glance. Trait visibility refers to the idea that some traits have clearer behavioral or physical manifestations than others, making them easier to judge. We saw strong self–other agreement for group loyalty, supporting its construct validity and its visibility as a trait; however, we also saw strong assumed similarity for group loyalty, which is often an indication that a trait is less visible or more difficult to judge. The most likely explanation for this involves the strong actual similarity correlation. That is, it seems reasonable to conclude that dyad members can accurately judge group loyalty based on observable behavior and that the assumed similarity correlation is an artifact of this ratability and the strong level of actual similarity. However, it is also possible that this is a case of spurious accuracy—that is, that a dyad member uses assumed similarity as a heuristic for a trait that is difficult to judge, and the actual similarity of the dyad artificially creates "accuracy." Further research will be necessary to determine the exact reason for the self–other agreement observed for group loyalty, but generally, we believe this serves as evidence of the trait's validity.

Individual loyalty, on the other hand, shows a more recognizable pattern of lower agreement paired with higher assumed similarity; moreover, following the general pattern for most personality traits (Watson et al., 2004), there was no evidence of actual similarity on this dimension. One explanation for the lower than expected agreement correlation could simply be that individual loyalty is more difficult to judge than group loyalty; that is, it is less visible. Another possible explanation lies in construal. Although our conceptualization of loyalty to individuals cuts across several types of relationships, the couples we assessed fell into one specific category. It is possible that when we asked a wife to judge her husband's individual loyalty, she may have automatically began to think in terms of loyalty as it relates specifically to her, despite the clarity of the item content. So, this may be a case in which we are attempting to assess a more global characteristic, but we are encountering interference from a circumscribed, or context-specific, judgment (Swann, 1984). It therefore would be useful to assess individual loyalty as it pertains specifically to the marital relationship versus generally to all relationships. Perhaps drawing that distinction would increase agreement in this situation. Such ambiguity does not exist with group loyalty, as it could be considered slightly further removed from the marital relationship in most cases. It might also be worthwhile to examine the stability of partner perceptions of individual loyalty, as recent research indicates that instability in perceived level of partner commitment predicts poorer relationship outcomes (Arriaga, Reed, Goodfriend, & Agnew, 2006).

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Limitations and Directions for Future Research

Although these studies have contributed to the literature in several ways, they are limited in many respects and represent only the initial steps in the broader process of construct validation. For instance, despite the fact that we examined a wide range of constructs, it clearly will be important to examine an even broader range of measures in the future to establish the convergent and discriminant validity of the IGLS. The Group Loyalty Scale, which emerged somewhat unexpectedly from the data, should be examined with other existing group loyalty scales (e.g., Scott, 1965) to establish convergent validity. Along these lines, it would also be interesting to compare the individual loyalty construct to that of commitment in both friendship settings (Fehr, 1999) and in the context of close romantic relationships (Johnson, 1999; Rusbult et al., 2001). Finally, because loyalty is likely considered by many to be a human strength, it would be worthwhile to examine the relation between individual and group loyalty and Peterson and Seligman's (2004) list of core virtues.

Another limitation from this set of studies is that we have not yet established the predictive validity of the scales. It would be interesting to see how well self-ratings on the IGLS can predict actual patterns of interpersonal behavior. For example, it might be useful to examine the effectiveness of the IGLS scales in terms of predicting behaviors such as those observed in Moreland and McMinn (1999) and Drigotas et al. (1995). In addition, following up on our sample of married couples from Study 5 might help us to determine whether the IGLS has any predictive validity in a relationship context.

Future research also is needed to examine how interpersonal loyalty is related to other hypothesized types of loyalty such as brand loyalty, product loyalty, and organizational loyalty. Is there some common thread to all of these concepts so that one can appropriately speak of a broader, overarching construct of "loyalty"? If not, is *loyalty* even the proper word for all of these constructs?

In a related vein, future work may help to clarify the nature of interpersonal loyalty itself. In this regard, it is noteworthy that items assessing loyalty toward family members (e.g., "It is important to be loyal to your family"; "I would remain loyal to members of my family, even if they did things I thought were wrong") were repeatedly split between the two factors in our samples; accordingly, these family-based items were dropped from the final versions of the IGLS scales. Conceptually, this split makes considerable sense: Family relationships have a strongly personal quality that make them somewhat similar to friendships and other types of content subsumed within the Individual Loyalty Scale but also reflect a sense of collective responsibility that is comparable to the content tapped by the Group Loyalty items. It is possible that family-based loyalty ultimately defines a separable third dimension of interpersonal loyalty; this is an interesting question for future research.

Despite these limitations, this research represents an important first step in the scientific study of interpersonal loyalty. We believe that trait loyalty is a meaningful dispositional construct that has been surprisingly neglected in the past and that merits much closer scrutiny in the future. We hope that our studies will stimulate greater attention to this understudied aspect of personality.

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APPENDIX

Items Composing the Individual and Group Loyalty Scales (IGLS)

Individual Loyalty

- I would not betray someone's trust.
- If I make a promise to a friend, I will keep it.
- People can always count on me.
- I stand by my friends, even when they make mistakes.
- I consider myself to be a loyal person.
- I am always ready to come to the aid of a friend.
- I would sacrifice my time and money to help a friend.
- I am concerned about the well-being of my friends.
- I will defend my friends against criticism, even when they are not present.
- I can still be a friend to someone who does things that I dislike.
- It is important for me to keep in touch with old friends.
- I would never turn my back on a friend.

Group Loyalty

- I am loyal to my country.
- It is important to show respect for our country's flag.
- I admire people who show a lot of "school spirit."
- I am personally offended when someone "badmouths" my country.
- I would describe myself as a "team player."
- Patriotism is a quality that I admire greatly.
- It bothers me when someone criticizes our country.
- I remain loyal to schools I've attended in the past.

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