

RELATIONAL UNCERTAINTY AND INTERACTION ENJOYMENT AS PREDICTORS OF  
RELATIONAL MAINTENANCE

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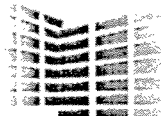
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## Relational Uncertainty and Interaction Enjoyment as Predictors of Relational Maintenance

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This study explored predictors of relational maintenance behaviors within the context of friendships. Several theoretical frameworks were compared—equity theory, self-expansion theory, the relational turbulence model, and the interaction enjoyment approach. Participants included 371 young adults who completed online questionnaires concerning their perceptions of friendship maintenance behaviors with a close or casual friend. Results supported self-expansion theory, the relational turbulence model, and the interaction enjoyment approach as significant theoretical explanations of friendship maintenance behaviors. The central goal of this study was accomplished in that relational uncertainty and interaction enjoyment emerged as complementary, and even stronger, predictors of relational maintenance behaviors than the other theoretical explanations. Overall, interaction enjoyment was the strongest predictor of friendship maintenance. Conversely, the traditional equity approach received minimal support. The theoretical, methodological, and practical implications of these findings were discussed.

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### Relational Uncertainty and Interaction Enjoyment as Predictors of Relational Maintenance

Friendships are the most common close relationships individuals engage in during their lifetime (Dainton, Zelle, & Langan, 2003), yet the communication discipline has devoted relatively less attention to them than other types of close relationships (Oswald, Clark & Kelly, 2004). Nevertheless, both research and personal experience suggest that unless friends make an effort to keep a relationship together, it tends to decay over time (Dindia, 2003). Although at times challenging, friendships promote several health and psychosocial benefits (Stafford & Canary, 1991). For instance, Rath and Harter (2010) claimed close friendships are vital to health, happiness, and even workplace productivity. Close friends offer a sense of belonging, emotional stability, opportunities for conversation, assistance, reassurance of worth and value, and personality support (Rawlins, 1992). Arguably, regardless of life stage, profession, or health condition, friendship is essential to overall well-being (Rath & Harter, 2010). Friendship clearly offers many rewards, and thus, it is no wonder that many people place great importance and value on maintaining close friendships.

However, individuals do not have the time, energy, or emotional resources to establish and maintain committed friendships with everyone they encounter. Therefore, they choose to maintain some relationships while letting others deteriorate. This begs the question of what predicts ongoing friendship, given that it is so important in ensuring the health and well-being of the relationship and both individuals involved. To answer this question, over the past two decades communication researchers have devoted much attention to understanding what qualities of a relationship motivate members' relational maintenance behavior. Interpersonal scholars have advanced several theoretical explanations for why individuals choose to invest in some relationships more than others. Most notably, Stafford and Canary advanced equity theory as the

theoretical foundation for their studies of relational maintenance (Stafford & Canary, 1991). Specifically, Stafford and Canary have argued that people maintain relationships that are equitable. Although some research supports the notion that equitable relationships are more satisfying than inequitable ones (Davidson 1984; Stafford & Canary, 2006), findings are mixed regarding whether inequity is associated with reduced maintenance behavior (Davidson, 1984; Ledbetter, Stassen-Ferrera, & Dowd, 2013; Ragsdale & Brandau-Brown, 2007a, 2007b; Van Yperen, & Buunk, 1990). Additionally, self-expansion theory has been associated with relational strength and other important relational constructs (Aron, Aron, & Smollan, 1992). However, this theoretical explanation has only been specifically linked to relational maintenance within the context of romantic relationships and may be equally impactful within the context of friendship (Ledbetter et al., 2013).

In response to these series of critiques, Canary and Stafford (2007) claimed they readily welcome other theoretical perspectives that explain relational maintenance, and accordingly, this study aims to test two possible complementary theoretical approaches. First, previous research has demonstrated that uncertainty plays an important role in the development, maintenance, and termination of close relationships (e.g., Berger & Bradac, 1982; Berger & Calabrese, 1975; Dainton & Aylor, 2001; Knobloch & Solomon, 1999; Planalp, Rutherford, & Honeycutt, 1988). Second, it makes sense that people will be more attracted to and more likely to form close friendships with those whom they enjoy interacting (Burlison & Samter, 1994). Further, it is likely that both relational uncertainty and interaction enjoyment are interdependent as negative feelings often accompany uncertainty (Knobloch, Miller, & Carpenter, 2007; Planalp et al., 1988). In response to Canary and Stafford's (2007) call, the goal of this research was to determine whether the relational turbulence model (Knobloch & Solomon, 1999) and interaction



enjoyment approach (Burleson & Denton, 1992) further explain why friends engage in maintenance behaviors.

### **Theoretical Perspective**

#### **Relational Maintenance**

Relational maintenance behaviors are strategies people use “to keep a relationship in existence, to keep relationships at a specific state or condition, to keep a relationship in satisfactory condition, or to keep a relationship in repair” (Dindia & Canary, 1993, p.163). Individuals utilize different maintenance behaviors to make up our maintenance routine, depending on the type and goal of the relationship (Dainton & Aylor, 2002; Dindia & Canary, 1993). For example, talking about outside romantic interests within the context of a committed romantic relationship most likely will not foster further relational development, although the same behavior may foster closeness within the context of a friend or sibling relationship (Weger & Emmett, 2009).

Scholars have advanced a number of typologies of friendship maintenance behavior (Fehr, 1996; Hays, 1984; Oswald et al., 2004). Stafford and Canary’s (1991) five relational maintenance strategies—positivity, assurances, openness, shared tasks, and shared networks—are by far the most known and most often utilized by communication researchers. However, one weakness of the measure is that it was originally developed for the context of romantic relationships. For the purposes of this investigation, an alternative operationalization that bears face similarity to Stafford and Canary’s (1991) typology is Oswald, Clark and Kelly’s (2004) four-factor typology. Although this measure resembles Stafford and Canary’s typology, it was specifically designed to target friendships. For example, Ledbetter and Kuznekoff (2012) used this measure because it possesses greater face validity for measuring friendship maintenance than

maintenance in romantic relationships.

Oswald and colleagues (2004) identified four strategies that parallel and complement Stafford and Canary's (1991) widely accepted relational maintenance inventory. *Positivity* is an effort to make the relationship more rewarding and enjoyable (e.g., make each other laugh). This dimension includes antisocial behaviors that are to be avoided (e.g., blame each other). *Supportiveness* is behavior that provides assurance and support, similar to Stafford and Canary's (1991) assurances dimension (e.g., complement each other). *Openness* includes self-disclosure and general conversation (e.g., give advice). Finally, *interaction* includes activities that friends do together (e.g., celebrate special occasions). Oswald and colleagues identified this dimension as a "global interaction factor" as it incorporates both *shared tasks* and *shared networks* (Oswald et al., 2004, p. 436). Similar to Stafford and colleagues (1991), Oswald et al.'s friendship maintenance behaviors are all moderately, positively correlated with each other (Ledbetter & Kuznekoff, 2012).

How individuals maintain their relationships has important implications. According to a recent study, friendships are a context in which "adolescents can practice egalitarian and symmetrical relationship skills that they will need in their future adult life" (De Goede, Branje, Delsing, van Duin, VanderValk, & Meeus, 2012, p. 426). Thus, many of the same positive outcomes have been found to be positively associated with friendship maintenance as relational maintenance in marital relationships—control mutuality, commitment, satisfaction, and liking (Oswald et al., 2004; Stafford & Canary, 1991). Additionally, most individuals have a few close friendships they maintain, and they make clear distinctions between best, close, and casual friendships (Demir & Özdemir, 2010). These distinctions correspond with Oswald et al.'s (2004) findings that showed individuals engaging in higher or lower levels of maintenance

behaviors based on these distinctions. Therefore, the closer the relationship, the more relationship quality and psychological satisfaction individuals experience (Demir & Özdemir, 2010). Thus, it appears it is most desirable to maintain close relationships. However, people still make distinctions (i.e. casual, close, best) and choose to maintain some relationships more than others. One explanation for this behavior may be due to the desire to have reciprocity and equity in friendships.

### **Equity theory**

As previously mentioned, there are several theoretical frameworks that explain why relational partners engage in relational maintenance behaviors. Stafford and Canary (1991) built from the larger tradition of social exchange theory and, arguably, were the first to connect *equity* (i.e., the extent to which partners possess equivalent cost/reward ratios) to relational maintenance. Although this theoretical explanation has encountered significant critique, Canary and Stafford's measure has become widely accepted, and even their critics acknowledge that it "has become the most widely used instrument for the measurement of relational maintenance and the de facto standard, especially with regard to romantic relationships" (Ragsdale & Brandau-Brown, 2004, p. 122).

Stafford and Canary (2006) are clear about the logic underpinning their theoretical claim that connects equity theory and relational maintenance—people who perceive their relationships as equitable engage in efforts to maintain the equity of those relationships. Related assumptions include the following:

People seek to maximize their outcomes, outcomes are maximized in equitable relationships, people reward those who treat them equitably and punish those who treat them inequitably, inequity leads to distress, and people will attempt to restore equity as a

result of distress due to inequity (Canary & Stafford, 1992, p. 244).

Maintenance behaviors are both costly and rewarding; therefore, people seek to balance fairly the number of inputs and outputs so as to ensure that neither person feels underbenefited (i.e., contributes more to the relationship than does the partner) or overbenefited (i.e., receives more from the relationship than does the partner; Canary & Stafford, 1992). According to equity theory, either form of inequity may result in negative emotions such as anger, resentment, hurt, and guilt (Sprecher, 1986). Canary and Stafford (1992) claim partners enact maintenance behaviors as a means to sustain the relational status quo, and perceptions of inequity would reduce the desire to maintain the relationship.

In spite of their parsimonious theoretical claim, empirical evidence has provided mixed support. Stafford and Canary have conducted multiple studies that consistently indicate equity as a significant predictor for wives' maintenance behavior but not husbands' maintenance behavior (Canary & Stafford, 1992; Stafford & Canary, 2006). Likewise, Dainton (2003) found only nonsignificant associations between maintenance behaviors and equity, and other studies have produced inconclusive or nonsignificant findings (Hess, Pollom, & Fannin, 2009; Messman, Canary, & Hause, 2000). Thus, in response to critiques from Ragsdale and Brandau-Brown (2007a, 2007b) indicating this lack of empirical support, Stafford and Canary (2006) claimed equity theory might be only one of many other theoretical frameworks that explain relational maintenance. These critiques notwithstanding, I advanced the following hypothesis to replicate Stafford and Canary's claim:

H1: Within friendships, equity will have a curvilinear association with relational maintenance behaviors.

### **Self-expansion theory**

In response to Ragsdale and Brandau-Brown's (2007a) critique of equity theory and Canary and Stafford's (2007) call for additional explanatory mechanisms, Ledbetter, Stassen-Ferrara, and Dowd (2013) suggested Aron and Aron's (1986) self-expansion theory as an alternative perspective. In contrast to equity theory's exchange orientation, self-expansion theory conceptualizes relational partners as communally oriented, such that individuals are motivated to expand their sense of self by sharing resources, possessions, perspectives, and identities with close relational partners (Aron & Aron, 1986). Thus, Aron and colleagues (1992) claimed that in close relationships individuals experience a shift in identity as they begin to less clearly differentiate between themselves and their partner, progressing more toward an "ours" and "we" mentality. Instead of keeping track of exchanges and being concerned with maintaining a balance of costs and rewards, close partners (such as friends) instead seek to maintain a communal bond (Dainton et al., 2003). Communal bonds are maintained by sharing information, tasks, activities, social support, and other common maintenance behaviors. In many studies, Aron and colleagues' (1992) *inclusion of the other in the self* (IOS) instrument has assessed the extent to which a person possesses such a communal orientation toward a relational partner.

Although a social-cognitive theory, researchers have linked self-expansion theory to a number of important relational communication constructs such as marital satisfaction (Reissman, Aron, & Bergen, 1993), frequency of self-disclosure (Aron, Melinat, Aron, Vallone, & Bator, 1997), use of plural pronouns when describing a romantic relationship (Agnew, Van Lange, Rusbult & Langston, 1998), and, most notably for the current study, frequency of relational maintenance behavior in romantic relationships (Ledbetter et al., 2013). Based on this body of research, a second hypothesis was advanced for consideration:

H2: Within friendships, IOS will be positively associated with relational maintenance behavior.

Without diminishing the importance of equity theory or self-expansion theory, the chief aim of this project is to advance relational uncertainty and interaction enjoyment as additional, and perhaps even stronger, predictors of relational maintenance behaviors. In the next section of this warrant, I will outline a theoretical rationale for the predictive role of each construct.

### **Relational Uncertainty**

Uncertainty is “a lack of confidence about how an interpersonal encounter will proceed” (Knobloch & Solomon, 1999, p. 262). Therefore, perhaps it is not surprising that uncertainty is often present in ongoing interpersonal relationships (Baxter & Montgomery, 1996; Honeycutt, 1993). *Relational uncertainty* is not isolated to major transitions but is most often experienced to some degree throughout the entire relationship (Thiess & Solomon, 2008). Thus, according to uncertainty reduction theory (Berger, 1987), one of the fundamental (though perhaps unconscious) goals in a relationship is to describe, explain, and predict behavior by gaining understanding of one another (Knobloch & Solomon, 1999). Although important in initial stages of relationship development, sustained uncertainty about the relationship can be harmful to the relationship’s health and longevity (Baxter & Montgomery, 1996; Byrne & Murnen, 1988; Livingston, 1980). In other words, “in order for a relationship to continue, it is important that the person involved in the relationship consistently update their fund of knowledge about themselves, their relational partner, and their relationship” (Berger & Bradac, 1982, p. 13).

Building from uncertainty reduction theory, Solomon and Knobloch (2004) advanced the relational turbulence model as a means of explaining uncertainty experienced beyond initial interactions. According to the model, individuals experience relational turbulence, or instances

of increased emotional reactivity, as a result of perceptions of partner interference and relational uncertainty (Solomon & Knobloch, 2004). Specifically, relational uncertainty may be detrimental to the maintenance of ongoing relationships as it is negatively correlated with relational stability and communication quality (Knobloch, 2007; Knobloch & Theiss, 2010), and it is positively associated with negative feelings and less frequent relational communication (Solomon & Knobloch, 2004; Knobloch et al., 2007; Knobloch & Theiss, 2011).

Relational uncertainty is “the degree of confidence people have in their perceptions of involvement within close relationships” (Knobloch & Solomon, 1999, p. 264). This conceptualization is a combination of our uncertainty regarding the self, the partner, and the relationship (Knobloch & Solomon, 1999). *Self uncertainty* refers to the questions people have about their own involvement in the relationship (e.g., How certain am I about how much I am interested in my relationship with my partner?). *Partner uncertainty* refers to the amount of ambiguity people experience about their partner’s involvement in the relationship (e.g., How certain am I about whether or not my partner will want to be with me in the long run?). *Relationship uncertainty* refers to the doubts people have regarding the nature of the relationship itself (e.g., How certain am I about the future of this relationship?). Ultimately, a global level of relational uncertainty refers to “the doubts that stem from how partners manage, negotiate, and experience their close relationships” (Knobloch & Carpenter-Theune, 2004, p. 178).

It is important to note that relational uncertainty has been examined predominantly in the context of romantic relationships. However, neither Knobloch nor her co-authors have articulated any inherent limitations of extending this theoretical framework to the contexts of friendships; indeed, relational uncertainty is clearly present in all relationships (Brashers, 2001). I contend that relational uncertainty may manifest itself in a number of ways within the context

of a friendship. Uncertainty may exist concerning behavioral norms, such as “not knowing what to say or do within the interaction” (Knobloch & Solomon, 1999, p. 264). For example, an individual may be hesitant to share honest feelings with a friend due to his or her inability to predict their friend’s potential reaction. Individuals in a friendship may also question the value of the friendship. For instance, they might be unsure as to whether or not the friendship is worth the time and energy they are investing.

Relational partners must also consider the overall goal or future of the relationship. Uncertainty or doubt about the future of the relationship or about partner commitment may compromise the stability of the relationship, potentially resulting in conflict (Baxter & Wilmot, 1984; Berger, 1987; Siegert & Stamp, 1994). Finally, lack of definition in the relationship can be a sign of uncertainty. According to Afifi and Schrodt (2003), “individuals may avoid talking about the state of the relationship as a defense mechanism” (p. 517). Increased uncertainty results in less intimate interaction (Weger & Emmett, 2009). Further, more uncertainty leads to a decrease in common maintenance behaviors (Weger & Emmett, 2009). Ultimately, it would seem that uncertainty diminishes the desire to invest time and energy in close relationships, including friendships.

Moreover, maintenance strategies can be a means of uncertainty reduction (Dainton & Aylor, 2001), such as assuring one’s partner by emphasizing the future of the relationship or openly disclosing positive information about oneself. Ficara and Mongeau (2000) also found openness, assurances, and positivity to be negatively associated with relational uncertainty, and Dainton and Aylor (2001) showed that all five of Stafford and Canary’s (1991) relational maintenance behaviors were inversely related to relational uncertainty in romantic relationships. Thus, I proposed the following hypothesis:



H3: Within the context of friendships, relational uncertainty will inversely predict relational maintenance behaviors.

### **Interaction Enjoyment**

Since Byrne (1971) first proposed an association between similarity and attraction, scholars have sought to explore the connection between different types of similarities and interpersonal relationship development. Additionally, the Social Skill Similarity Model (Burlison & Samter, 1996) has guided much research as it proposes that similarities in social-cognitive and communication skills attract people to each other. It makes sense that one's communication efficacy would, in part, determine one's ability to maintain a satisfying, healthy relationship. Thus, Burlison and Samter (1994) claimed, "similarity in social skills that facilitate enjoyable, rewarding interactions should be particularly important determinants of relationship growth and maintenance" (p. 82). This idea is the theoretical essence of the *interaction enjoyment approach*.

Scholars have examined interaction enjoyment in both romantic relationships and friendships. Burlison and Denton (1992) found that married couples were more similar in their social skill level than randomly generated couples, leading the researchers to conclude that these similarities promote attraction and relational development by fostering enjoyable interactions. This association was uncorrelated with relationship length, and thus, researchers argued that the similarity was preexistent versus built over time. In another study, participants were more attracted to strangers and dating partners having similar levels of cognitive complexity (Burlison, Kunkel, & Szolwinski, 1997). Neimeyer and Mitchell (1988) found that participants with similar levels of cognitive complexity were more likely to develop friendships.

Burleson, Samter, and Luchetti (1992) studied young children over the course of a school year. They found that children were most attracted to and formed reciprocated friendships with peers having similar levels of social-cognitive and communication skills. Even more, pairs of friends were found to have more similar communication skills than pairs of non-friends. It appears that the best explanation for these findings is that similarities in social-cognitive and communication skills promote attraction by fostering enjoyable interactions (Burleson & Denton, 1992). Thus, Burleson and Samter (1996) proposed:

It is not simply the capacity for two people to talk about feelings, hopes, expectations, etc., that matters in a relationship; rather, it is the capacity to talk about these matters in a similar way and on a similar level that promotes interpersonal attraction and friendship formation. (p. 136)

Expanding on the similarity-attraction hypothesis, I proposed that people develop friendships not simply because they recognize that they share these similarities with a friend, but because these similarities result in enjoyable and rewarding interactions. Interactions between friends who have skill similarities are more likely to be labeled as “interesting, stimulating, fun, and enjoyable whereas interactions between those having dissimilar skills may be experienced as boring, obnoxious, strained, awkward, and uninteresting” (Burleson & Samter, 1996, p. 128). Accordingly, a number of scholars have concluded that one of the most important functions and reasons for having friends is to have fun (Duck, 1991; Hays, 1989; Rawlins, 1992).

Consequently, I advanced the following hypothesis:

H4: Within friendships, interaction enjoyment will positively predict relational maintenance.

In light of the established argument, I responded to Stafford and Canary's call to explore other predictors of relational maintenance. I sought to test whether two of the frameworks advanced in this paper—relational uncertainty and interaction enjoyment—accounted for unique variance in friendship maintenance that had yet to be explained by equity or IOS. Hence, I asserted the following hypothesis:

H5: Relational uncertainty and interaction enjoyment will explain variance in relational maintenance behavior beyond that explained by equity and IOS.

In addition to main effects for both relational uncertainty and interaction enjoyment, it is plausible that these two constructs also interact to predict relational maintenance. It is well established that relational uncertainty is negatively associated with factors that possibly contribute to interaction enjoyment such as liking and attraction (Berger & Calabrese, 1975). Relational uncertainty is also positively associated with variables that could potentially inhibit interaction enjoyment such as negative emotions (Knobloch & Solomon, 2003), less fluent communication (Knobloch, 2006), increased irritations (Theiss & Solomon, 2006), and more challenging conversations (Knobloch & Solomon, 2005). Thus, it stands to reason that relational uncertainty and interaction enjoyment are inversely associated.

I propose that in addition to this inverse association, relational uncertainty and interaction enjoyment may interact to predict relational maintenance. Conceptually, it is not difficult to imagine situations where high interaction enjoyment occurs concomitantly with relational uncertainty. For example, close friends who typically enjoy each other's company could experience a major change or transition (e.g., a job relocation or a birth of a child) that causes some level of global relational uncertainty. Conversely, some may choose to only maintain a casual friendship with a coworker. In this context, although there is little uncertainty about

either parties' involvement in the relationship, forced and awkward interactions are likely to result in less investment of time and energy in maintaining a close friendship.

Thus, I posit that the potential exists for a moderation effect between relational uncertainty and interaction enjoyment in determining relational maintenance. Specifically, assuming that interaction enjoyment is a foundational trait-like quality of close relationships (Burluson & Denton, 1992), relational uncertainty may moderate the association between interaction enjoyment and relational maintenance, such that high uncertainty reduces the strength of the association. Thus, I predicted:

H6: High relational uncertainty weakens the positive association between interaction enjoyment and relational maintenance behaviors.

## **Methods**

### **Participants**

After obtaining approval from the Institutional Review Board, I solicited participation from undergraduate students enrolled in various communication courses at a mid-sized, private university in the southwest United States. Students earned class credit or extra credit for participating in the study. All participants were at least 18 years of age. The sample included 371 participants. The sample consisted of 164 men (44.2%) and 207 women (55.8%). The majority of the participants identified themselves as Caucasian ( $n = 317$ ; 85.4%), with others identifying themselves as African American ( $n = 18$ ; 4.9%), Hispanic American ( $n = 17$ , 4.6%), or Asian American ( $n = 6$ ; 1.6%).

### **Procedure**

Participants were recruited from undergraduate communication courses to complete the questionnaire. Students completed the online questionnaire during a designated class period or

outside of regular class time, and all responses were anonymous. After indicating consent, participants provided basic demographic information (e.g., age, sex, and ethnicity). Then, participants completed the remaining measures with a self-selected target friend in mind. Participants were instructed that the friend should not be a family member or romantic partner. To diversify the types of friends selected, participants were randomly assigned to think of either a close friend or a casual friend. Most friends were female ( $n = 211$ , 56.9%) and most participants reported on a same-sex friend (84.9%). Participants were awarded minimal course credit or extra credit (less than 2% of the total course grade) for their participation in the research. The questionnaire took approximately 20 minutes to complete, after which participants were thanked for their participation.

### Measures

**Equity.** In previous relational maintenance research, two items have been widely used to measure equity (Dainton, 2003; Stafford & Canary, 2006). The first item originated with Hatfield, Walster, and Traupmann (1979): “Considering how much you and the other person put into your relationship, and how much you and the other person get out of it?” Responses were based on a 7-point Likert-type scale ranging from 1 (*I am getting a much better deal than the other person*) to 7 (*The other person is getting a much better deal*) with a midpoint of 4 (*Neutral/Balanced*). The second item originated with Sprecher (1986): “Consider all the times when your relationship has become unbalanced and one person has contributed more for a time. When this happens, who is more likely to contribute more?” Responses were obtained via a 7-point Likert-type scale ranging from 1 (*The other person is much more likely to be the one to contribute more*) to 7 (*I am much more likely to be the one to contribute more*) with a midpoint of 4 (*Neutral/Balanced*). Both items were modified slightly to clearly address the target friend

(e.g., “Consider how much you and your friend put into your friendship...”). Previous studies have found these two items to be moderately, positively correlated ( $r = .46, p < .01$ ) and have taken this as indication of the measure’s reliability and validity (Stafford & Canary, 2006). The items obtained a slightly weaker (but still statistically significant) correlation in this study,  $r = .33, p < .01$ .

**Inclusion of the other in the self (IOS).** Aron and his colleagues’ (1992) single-item pictorial measure assessed inclusion of the other in the self (IOS). This measure presents participants with a series of seven Venn diagrams, with each diagram presenting a different degree of overlapping circles. Each of the seven diagrams represents a point on the scale, with the low end of the scale represented by circles that barely overlap and the high end of the scale represented by circles that almost entirely overlap. The degree of overlap depicted by each of the individual pairs represents the degree of interconnectedness. Participants were asked, “Please indicate the picture below which best describes your relationship with this friend.” Aron and colleagues (1992) established the measure’s construct, predictive, and discriminant validity, in addition to test-retest reliability, and several subsequent studies have effectively used the scale and further validated the measure (e.g., Agnew et al., 1998), including as a predictor of relational maintenance behavior (Ledbetter et al., 2013).

**Relational uncertainty.** Participants completed the relationship uncertainty dimension of Knobloch and Solomon’s (1999) relational uncertainty measure. The full measure also contains items measuring self uncertainty (i.e., uncertainty about one’s own commitment to the relationship) and partner uncertainty (i.e., uncertainty about the partner’s commitment to the relationship). However, the factor analysis in Knobloch and Solomon (1999) indicated that the relationship uncertainty items cross-loaded onto the self and partner uncertainty dimensions, and

thus, it is unsurprising that Knobloch and Theiss (2010) later argued that it “exists at a higher level of abstraction than either self or partner uncertainty” (p. 598). Given the theoretical preeminence of the relationship uncertainty construct and its central theoretical role here, as well as for the sake of analytical simplicity and reduced participant survey fatigue, participants only completed the relationship uncertainty subscale. The measure consists of 16 items that reflect four domains of relationship uncertainty (i.e. behavioral norms, mutuality, definition, and future). Participants responded to a 6-point Likert-type scale (1 = *completely or almost completely uncertain*, 6 = *completely or almost completely certain*) in response to the prompt, “How certain are you about . . .?” Wording of items was modified to specifically target one of the two types of friendship. Sample items included “What you can and cannot say to each other in this friendship?” and “The future of this friendship?” Numerous studies have established the construct validity and demonstrated acceptable reliability for this instrument (e.g., Knobloch & Solomon, 2005; Weger & Emmett, 2009), with Solomon and Knobloch (2004) reporting an alpha reliability of .90 for the relationship uncertainty dimension of the scale. In this study the Cronbach’s alpha for the relationship dimension was  $\alpha = .96$ .

**Interaction Enjoyment.** To measure interaction enjoyment, I selected items from Hecht’s (1978) interpersonal communication satisfaction inventory that assessed the participant’s global communication satisfaction with the friend. Five of the measure’s eight items were chosen directly from Hecht’s previously established scale. The other three items were added as a means to increase face and construct validity. To verify dimensional structure, this modified measure was submitted to exploratory factor analysis using principal components extraction and varimax (i.e., orthogonal) rotation. Initially, two dimensions were identifiable using factor selection criteria of Eigen value  $> 1$ ; however, the second dimension consisted of only one item,

that being the only reverse-coded item in the measure. Deleting this item produced a unidimensional solution with one factor explaining 75.3% of the total variance among items. Sample items included “I feel as if I can talk about anything with this friend” and “I find it easy to talk with this friend.” Participants responded according to a 7-point Likert-type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). This scale produced an acceptable Cronbach’s alpha coefficient,  $\alpha = .94$ .

**Relational maintenance.** Oswald and her colleagues’ (2004) measure assessed relational maintenance behavior in the target friendship. In response to the prompt, “How often do you and your friend...” the measure assesses four dimensions of friendship maintenance behavior: (a) positivity (e.g., “Plan specific activities to do together?”), (b) openness (e.g., “Share your private thoughts with each other?”), (c) supportiveness (e.g., “Let each other know you want the relationship to last in the future?”), and (d) interaction (e.g., “Make an effort to spend time together even when you are busy?”). The measure contains 19 items assessed on a 6-point frequency scale ranging from 0 (*Never*) to 5 (*Very Frequently*). Oswald and colleagues (2004) established construct validity for each dimension and have demonstrated acceptable reliability for this scale overall ( $\alpha = .95$ ), with alphas for each subscale ranging from .74 from .92 (average  $\alpha = .85$ ). In this study, the friendship maintenance scale demonstrated strong internal reliability across all four dimensions with alpha coefficients of  $\alpha = .72$  for positivity,  $\alpha = .86$  for openness,  $\alpha = .90$  for supportiveness, and  $\alpha = .85$  for interaction.

### **Data analysis**

Study hypotheses were evaluated using a series of four hierarchical regression analyses (i.e., one for each dimension of relational maintenance behavior). After controlling for demographic variables (sex and relationship length) in step one, the second step of each



regression analysis controlled for the theoretical explanations of relational maintenance behavior identified in previous research (i.e., equity, Stafford & Canary, 2006, and IOS, Ledbetter et al., 2013). The third step will test the unique contribution associated with relational uncertainty and interaction enjoyment. The interaction effect between these two constructs was created using the orthogonalization procedure described by Little, Card, Bovaird, Preacher, and Crandall (2007) and entered in the third step of the regression.

### Results

Table 1 reports descriptive statistics (including means, standard deviations, and zero-order correlations) for all variables included in the study. The first four hypotheses addressed bivariate associations between relational maintenance and the four predictors of theoretical interest (i.e., equity, IOS, relational uncertainty, and interaction enjoyment). The first hypothesis (H1) predicted that equity would have a curvilinear association with relational maintenance, such that relational maintenance is most frequent in equitable relationships and less frequent in over/underbenefited relationships. The curvilinear term was created by mean-centering the linear term for equity, squaring it, and orthogonalizing the product term against the linear term using the procedure described by Little and his colleagues (2007). The first hypothesis received partial support in that the correlation matrix (see Table 1) revealed a significant association between the curvilinear equity term and the interaction dimension ( $r = -.14, p < .01$ ), as well as a significant association between the linear term and positivity ( $r = -.14, p < .01$ ) but no other dimension of relational maintenance. The curvilinear effect will be further decomposed in the discussion of the hierarchical regression analysis for H5.

The second hypothesis (H2) predicted that inclusion of the other in the self (IOS) would be positively associated with friendship maintenance. This hypothesis was supported, with IOS

significantly and positively associated with all four dimensions of relational maintenance: positivity ( $r = .49, p < .01$ ), openness ( $r = .63, p < .01$ ), supportiveness ( $r = .62, p < .01$ ), and interaction ( $r = .61, p < .01$ ). The third hypothesis (H3), that relational uncertainty would be inversely associated with relational maintenance, also received full support across all four dimensions of relational maintenance. Product-moment correlations between relational uncertainty and relational maintenance revealed positive associations between relational uncertainty and positivity ( $r = .66, p < .01$ ), openness ( $r = .69, p < .01$ ), supportiveness ( $r = .67, p < .01$ ), and interaction ( $r = .67, p < .01$ ). Likewise, the fourth hypothesis (H4) stated that interaction enjoyment would be positively associated with relational maintenance. Examination of the correlation matrix revealed strong positive associations between interaction enjoyment and all four dimension of relational maintenance: positivity ( $r = .79, p < .01$ ), openness ( $r = .78, p < .01$ ), supportiveness ( $r = .76, p < .01$ ), and interaction ( $r = .76, p < .01$ ). In summary, results provided robust support for H2, H3, and H4.

Table 1

*Descriptive Statistics and Correlations Among Manifest Variables*

Variables	<i>M (SD)</i>	1	2	3	4	5	6	7	8	9
1. Equity	4.23 (.77)	--								
2. Equity <sup>2</sup>	0.00 (1.25) <sup>a</sup>	.00	--							
3. IOS	4.47 (1.55)	-.05	-.05	--						
4. Rel. Uncertainty	3.11 (.95)	.12*	.15**	-.56**	--					
5. Int. Enjoyment	5.95 (.77)	-.14**	-.11	.60**	-.79**	--				
6. Positivity	4.46 (.73)	-.14**	-.07	.49**	-.66**	.79**	--			
7. Openness	4.55 (.99)	-.03	-.09	.63**	-.69**	.78**	.71**	--		
8. Supportiveness	4.64 (1.06)	-.06	-.09	.62**	-.67**	.76**	.72**	.88**	--	
9. Interaction	4.50 (1.02)	-.06	-.14**	.61**	-.67**	.76**	.69**	.84**	.86**	--

\*  $p < .05$  \*\*  $p < .01$ <sup>a</sup> indicates variable has been mean-centered and orthogonalized.

The last two hypotheses (H5 and H6) were tested using a series of four hierarchical regression analyses (Table 2), with one of the four dimensions of relational maintenance serving as the criterion variable in each model. In all four analyses, step one entered control variables (i.e., participant sex, friend sex, and length of friendship). Step two introduced IOS and both equity terms (i.e. linear and curvilinear) as predictors of maintenance identified in previous theory and research. In step three, relational uncertainty and interaction enjoyment were added as the new predictors of chief theoretical interest in this investigation. Finally, step four tested for an interaction effect between relational uncertainty and interaction enjoyment (H6). However, this term was nonsignificant in all four analyses and did not change the regression parameters in the other steps. Thus, no support emerged for H6, and the fourth step will be omitted from further discussion of the results of the regression analyses.

### **Positivity**

The hierarchical regression model with positivity as the criterion variable produced a significant correlation coefficient,  $R = .80$ ,  $F(9, 362) = 81.66$ ,  $p < .01$ , accounting for 64% of the variance in positivity. At step 1, only length of friendship was a significant positive predictor of positivity,  $\Delta R^2 = .04$ ,  $\Delta F = 4.78$ ,  $p < .01$ . Step 2 significantly increased the variance explained by the model,  $\Delta R^2 = .23$ ,  $\Delta F = 38.49$ ,  $p < .01$ . In this step, linear equity was inversely related to positivity; however, the curvilinear equity term was not a significant predictor. IOS was a positive predictor, and length of relationship ceased to significantly predict positivity. Step 3 also produced a significant increase in variance explained,  $\Delta R^2 = .37$ ,  $\Delta F = 189.89$ ,  $p < .01$ . When entering interaction enjoyment and relational uncertainty in this step, IOS and linear equity were no longer significant predictors. Interaction enjoyment was the only positive predictor, and none of the other variables significantly predicted positivity.

**Openness**

The hierarchical regression model with openness as the criterion variable produced a significant correlation coefficient,  $R = .82$ ,  $F(8, 362) = 90.43$ ,  $p < .01$ , accounting for 66% of the shared variance in openness. At step 1, participant sex and length of friendship were significant predictors of openness,  $\Delta R^2 = .04$ ,  $\Delta F = 4.50$ ,  $p < .01$ . Specifically, friendship length was positively associated with supportiveness and female participants reported engaging in more supportiveness than did male participants. In the second step, IOS was the only significant predictor of openness, and neither of the equity terms were significant,  $\Delta R^2 = .37$ ,  $\Delta F = 74.57$ ,  $p < .01$ . The third step also significantly increased variance explained in openness,  $\Delta R^2 = .26$ ,  $\Delta F = 143.22$ ,  $p < .01$ . At step 3, relational uncertainty was significantly and inversely related to openness and interaction enjoyment was significantly and positively related to openness. Additionally, whereas equity was not previously a significant predictor, the linear equity term became a significant positive predictor. IOS also remained a positive and significant predictor in the third step.

**Supportiveness**

The hierarchical regression model with supportiveness as the criterion variable produced a significant correlation coefficient,  $R = .82$ ,  $F(8, 362) = 91.72$ ,  $p < .01$ , accounting for 67% of the shared variance in supportiveness. At step 1, participant sex and length of friendship were significant predictors of supportiveness,  $\Delta R^2 = .08$ ,  $\Delta F = 10.50$ ,  $p < .01$ . Specifically, friendship length was positively associated with supportiveness and female participants reported engaging in more supportiveness than did male participants. At step 2, participant sex remained a positive predictor (but relationship length did not) and IOS served as a positive significant predictor,  $\Delta R^2 = .35$ ,  $\Delta F = 75.83$ ,  $p < .01$ . Step 3 also produced a significant increase in variance explained,

$\Delta R^2 = .24$ ,  $\Delta F = 129.53$ ,  $p < .01$ . In this step, relational uncertainty emerged as a significant inverse predictor and interaction enjoyment emerged as a significant positive predictor. As in previous steps, participant sex and IOS remained significant predictors in the third step.

### **Interaction**

The hierarchical regression model with interaction as the criterion variable produced a significant correlation coefficient,  $R = .79$ ,  $F(8, 362) = 76.42$ ,  $p < .01$ , accounting for 63% of the shared variance in interaction. At step 1, participant sex and length of friendship were positive predictors of interaction,  $\Delta R^2 = .03$ ,  $\Delta F = 4.05$ ,  $p < .01$ . The second step produced a significant increase in variance explained,  $\Delta R^2 = .36$ ,  $\Delta F = 72.31$ ,  $p < .01$ . In this step, the curvilinear equity term, but not the linear equity term, was significantly associated with interaction. Figure 1 presents the decomposition of this curvilinear effect. As predicted by equity theory, interaction maintenance was highest when the relationship was reported as equitable. Additionally, IOS was a significant positive predictor of interaction. At step 3, relational uncertainty and interaction enjoyment were significant predictors of interaction, such that relational uncertainty was inversely related to interaction and interaction enjoyment was positively related to interaction,  $\Delta R^2 = .24$ ,  $\Delta F = 114.18$ ,  $p < .01$ . Although IOS remained a significant predictor in this step, the curvilinear term ceased to serve as a significant predictor.

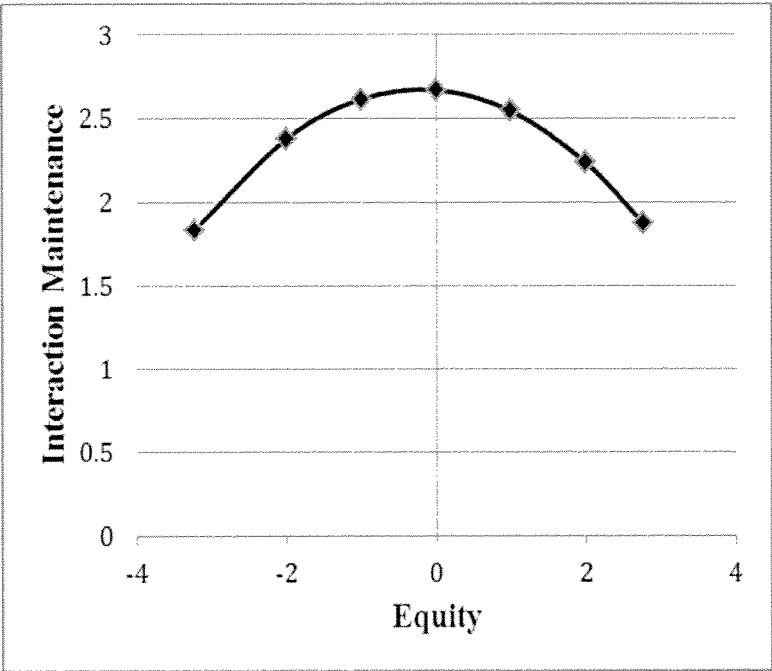


Figure 1. Equity as a curvilinear predictor of interaction maintenance

Table 2

*Summary of Hierarchical Regression Analyses for Variables Predicting Dimensions of Relational Maintenance*

Predictors	Positivity $B(\beta)$	Openness $B(\beta)$	Supportiveness $B(\beta)$	Interaction $B(\beta)$
<b>Step 1</b>	$\Delta R^2 = .04^{**}$	$\Delta R^2 = .04^{**}$	$\Delta R^2 = .08^{**}$	$\Delta R^2 = .03^{**}$
Participant Sex <sup>a</sup>	0.15(.10)	0.32(.16)*	0.59(.28)**	0.30(.15)*
Friend Sex <sup>a</sup>	0.01(.01)	-0.14(-.07)	-0.16(-.07)	-0.23(-.11)
Length	0.03(.17)**	0.03(.14)**	0.04(.16)**	0.03(.14)**
<b>Step 2</b>	$\Delta R^2 = .23^{**}$	$\Delta R^2 = .37^{**}$	$\Delta R^2 = .35^{**}$	$\Delta R^2 = .36^{**}$
Participant Sex <sup>a</sup>	0.06(.04)	0.15(.08)	0.42(.20)**	0.13 (.06)
Friend Sex <sup>a</sup>	0.12(.08)	0.01(.00)	0.01(.00)	-0.07(-.04)
Length	0.01(.09)	0.01(.04)	0.01(.06)	0.01(.05)
Equity	-0.12(-.13)**	-0.01(-.01)	-0.07(-.05)	-0.03(-.03)
Equity <sup>2</sup>	-0.03(-.06)	-0.06(-.07)	-0.06(-.07)	-0.09(-.11)**
IOS	0.22 (.46)**	0.39(.61)**	0.40(.60)**	0.39(.60)**
<b>Step 3</b>	$\Delta R^2 = .37^{**}$	$\Delta R^2 = .26^{**}$	$\Delta R^2 = .24^{**}$	$\Delta R^2 = .24^{**}$
Participant Sex <sup>a</sup>	0.07(.05)	0.16(.08)*	0.43(.20)**	0.14(.07)
Friend Sex <sup>a</sup>	0.11(.07)	-0.01(.00)	0.00(.00)	-0.08(-.04)
Length	0.01(.04)	0.00(.00)	0.04(.02)	0.00(.01)
Equity	-0.04(-.04)	0.08(-.06)	0.03(.02)	0.06(.04)
Equity <sup>2</sup>	0.01(.01)	-0.01(-.01)	-0.01(-.01)	-0.04(-.05)
IOS	0.00(.01)	0.14(.23)**	0.16(.23)**	0.15(.23)**
Rel. Uncertainty	-0.07(-.09)	-0.14(-.14)**	-0.14(-.13)*	-0.14(-.13)*
Enjoyment	0.51(.71)**	0.52(.55)**	0.53(.52)**	0.51(.51)**

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

<sup>a</sup>For participant sex and friend sex, male = 0 and female = 1.



### **Discussion**

The principal goal of this research was to test additional theoretical frameworks, as represented by relational uncertainty (the relational turbulence model; Solomon & Knobloch, 2004) and interaction enjoyment (the interaction enjoyment approach; Burleson & Denton, 1992), as predictors of friendship maintenance. These aims were met as both relational uncertainty and interaction enjoyment emerged as significant predictors of all four types of maintenance behavior, and effectively explained above and beyond the variance accounted for by the other theoretical frameworks. The results also aligned with previous research and, as suggested by self-expansion theory (Aron et al., 1992), identified inclusion of the other in the self as a reliable predictor (Ledbetter, et al., 2013). The traditional equity theory approach (Canary & Stafford, 1992), on the other hand, received only limited support. Consequently, the results of this study not only extend our theoretical understanding of relational maintenance, but also provide preliminary evidence as to how maintenance behaviors may vary as a function of equity, IOS, relational uncertainty, and interaction enjoyment.

#### **Associations Between Relational Maintenance and Theorized Predictors**

The first hypothesis (H1) predicted that equity would have a curvilinear association with friendship maintenance. This prediction was based on Stafford and Canary's (1991) classic argument that, based on a social exchange perspective, relational partners seek to maintain equitable relationships. This theoretical explanation has encountered significant critique (Ragsdale & Brandau-Brown, 2007a), especially given inconclusive empirical findings (Dainton, 2003; Hess et al., 2009; Ledbetter et al., 2013; Messman et al., 2000). The results of this study indicate similar equivocal results. At the bivariate level, only one significant, curvilinear relationship emerged between equity and interaction maintenance, such that friends are more

likely to spend time with one another when the relationship is equitable. No curvilinear association emerged for the other relational maintenance behaviors (positivity, openness, or assurances).

One reason that this significant association only emerged for interaction maintenance may be due to a fundamental difference between it and the other three maintenance constructs. Specifically, interaction time is a finite resource, unlike the other types of friendship maintenance, because time itself is a zero-sum resource. In other words, enacting positivity towards one friend does not restrict the amount of positivity that can be shared with another friend, but time given to one friend cannot later be given to another. Therefore, equity may be most influential in determining interaction maintenance because it indicates a greater level of resource commitment than do the other three types of maintenance. An underbenefitted individual is not likely to continue wasting their time on a friend who is unwilling to equally reciprocate. Ultimately, individuals have limited time in a day, so from a social exchange perspective, it is logical that relational partners would not invest much of their time, a costly resource, into friendships in which benefits and costs are not equitably distributed between partners.

The second hypothesis (H2) predicted that, based on self-expansion theory, inclusion of the other in the self (IOS) would be positively associated with relational maintenance. Results confirmed IOS as a significant predictor of all four types of friendship maintenance behavior. Self-expansion theory claims that people are fundamentally driven to expand their sense of self by building close relationships (Aron & Aron, 1986). Thus, friends may seek to maintain their relationship in order to expand their sense of self and foster a communal bond by engaging in maintenance behaviors such as encouraging one another, supporting one another, sharing

personal information, and spending time together. The more relational partners share a “we” mentality, the more motivated they are to maintain the friendship. Moreover, self-expansion theory suggests that people consequently gain access to the other person’s resources, perspectives, and identity (Aron, Mashek, & Aron, 2004). These results reinforce previous research findings that link IOS to relational maintenance in romantic relationships (Ledbetter et al., 2013) and extend this association to friendships as well.

These findings call attention to an ongoing theoretical debate in the field of close relationships: whether partners in close relationships (such as friendships) possess a communally-based or exchange-based orientation toward each other. According to Clark and Mills (1979), communal relationships focus on concern for another’s welfare as opposed to equality of exchange. Thus, due to the shared distribution of power and obligations characteristic of a friendship, friends may be more likely to feel equal responsibility for one another and the relationship (Clark & Mills, 2011). Additionally, the context of friendship allows for the sharing of resources (e.g. companionship) that is mutually rewarding for both relational partners. Further, the communally-oriented perspective may explain why individuals often remain in friendships that are one-sided or unequal in exchange. To the extent that IOS reflects a communal orientation toward the friend (Aron et al., 2004), the pattern of results obtained in this study suggests that friends with a more communal orientation toward their friendship are more likely to engage in communication behaviors that maintain the friendship.

The third hypothesis (H3) predicted that relational uncertainty would be negatively associated with friendship maintenance behaviors. Like self-expansion theory (Aron et al., 1992), previous research has linked relational uncertainty to relational maintenance in romantic relationships (Dainton & Aylor, 2001; Ficara and Mongeau, 2000; Weger & Emmett, 2009).

Results from this study validated and extended this inverse association, as relational uncertainty was negatively associated with all four dimensions of friendship maintenance. In accordance with the relational turbulence model, relational uncertainty, or doubts about the nature of the relationship, may decrease relational stability (Knobloch, 2007; Knobloch & Theiss, 2010) and make friends reluctant about maintaining the uncertain friendship (Solomon & Knobloch, 2004; Knobloch et al., 2007; Knobloch & Theiss, 2011).

The fourth hypothesis (H4) predicted that interaction enjoyment would positively predict relational maintenance. The data supported this claim, indicating that individuals maintain friendships with people they think are fun and with whom they enjoy interacting. This finding is congruent with Burleson and Denton's (1992) skill similarity approach that claims similarity in social skills facilitates more enjoyable interactions, and, therefore, individuals are most likely to develop and maintain relationships with those who have similar social skill levels. In other words, a key function of friendship is to have fun, and in order to fulfill this function, relational partners must have certain social skills that make pleasurable interactions possible (Burleson & Samter, 1994; Duck, 1991; Hays, 1989; Rawlins, 1992). Hence, it makes sense that individuals would seek to maintain and grow friendships that are built on enjoyable, rewarding interactions. It is worth noting that this investigation did not directly assess the social skill of participants or their friends, and, thus only future research can determine the extent to which similar social skills explain the association between interaction enjoyment and friendship maintenance.

### **Comparing Predictors of Relational Maintenance**

Beyond the bivariate associations addressed by H1-H4, the central goal of this study was to compare the relative predictive power of each of the four constructs (i.e., equity, IOS, relational uncertainty, and interaction enjoyment) in a single regression model, with the aim of

identifying predictors of maintenance unaccounted for in the traditional equity theory approach (Stafford & Canary, 2006). Specifically, the fifth hypothesis (H5) asserted that relational uncertainty and interaction enjoyment would explain above and beyond the variance explained by equity and IOS. I will discuss these findings by order of maintenance behavior.

In step 1, length of relationship was a significant predictor of positivity maintenance. However, in step 2, after controlling for equity and IOS, length of relationship was no longer a significant predictor. This may be because self-other overlap takes time to develop, but it is ultimately this shift in cognitions (rather than simply relationship length) that fosters maintenance behavior. Also in the second step, equity emerged as an inverse predictor of positivity, such that relational partners who feel overbenefitted are more likely to enact positivity than are partners who feel underbenefitted. However, in step 3, equity no longer predicted positivity once controlling for relational uncertainty and interaction enjoyment. In this final step, only interaction enjoyment served as a significant (positive) predictor of positivity. This finding is consistent with the assumption that positivity is somewhat of a baseline maintenance behavior. No matter how inequitable, uncertain, or detached the relationship may be, friends will most likely still try to be amiable and enact pleasantries toward one another as long as they enjoy communicating.

In regards to openness maintenance, sex of participant and length of relationship were significant predictors in the first step of the regression model. It makes sense that the longer the friendship, the longer friends have had the opportunity to develop intimacy, which is necessary for self-disclosure and openness. However, in the second step, after controlling for equity and IOS, only IOS was a significant predictor. In other words, the more perspectives and resources shared between friends, the more open and willing friends are to disclose their personal feelings

and opinions. In the final step of the regression, IOS, relational uncertainty, and interaction enjoyment all contributed to openness. Participant sex also re-emerged as a significant predictor in the third step, such that women were more likely to engage in openness. This finding is in line with previous research that suggests women tend to be more open and transparent than men (Dindia & Allen, 1992).

Supportiveness maintenance yielded similar results. Both participant sex and length of relationship were significant predictors in the initial step of the regression. In step two, length of relationship was no longer significant once IOS was controlled for and emerged as a significant positive predictor. It appears the intimacy that was previously accounted for by length of relationship was in fact due to self-other overlap.

Worthy of note, participant sex continued to serve as a significant predictor in the third step, even after controlling for all other variables. Like openness, supportiveness appears to be a more gendered form of friendship maintenance in that women were more likely to enact this type of maintenance. This finding is consistent with Kunkel and Burleson's (1999) argument that women tend to be socialized to be experts in emotional communication and social support.

In the final step, relational uncertainty and interaction enjoyment both emerged as significant predictors above and beyond what was accounted for by IOS. The more relational uncertainty experienced by relational partners, the less likely they are to give support such as advice and emotional validation. Conversely, friends who enjoy interacting are more likely to engage in such supportive behaviors. It makes sense that friends' shared social skills foster such enjoyable interactions by making it possible for them to effectively comfort and support one another. As stated by Burleson and Samter (1994), "it is not simply the capacity of two people to

talk about feelings, hopes, expectations, etc. that matter in a relationship; rather, it is the capacity to talk about these matters in a similar way and on a similar level” (p.136).

Both participant sex and length of relationship were significant predictors of interaction maintenance in the first step of the fourth regression analysis; however, these no longer served as significant predictors after the other theoretical explanations were taken into account. In the second step, the curvilinear equity term emerged as a significant predictor. Friends who view their relationship as equitable are more likely to spend time together. As previously discussed for H1, interaction time is a zero-sum resource, meaning that time is a limited and valuable resource and relational partners may be more concerned with getting something in return for their investment. Conversely, the other maintenance behaviors in the Oswald et al. (2004) typology are not zero-sum resources and, perhaps, are given more liberally. However, this interpretation also must be understood in light of the final step, where equity was no longer a significant predictor after entering relational uncertainty and interaction enjoyment into the model (with both emerging as significant predictors). In other words, regarding interaction time, it appears perception of equity is less important than the extent to which a person is certain about the friendship and enjoys interacting with the friend.

Across the four types of maintenance, the fifth hypothesis (H5) received overwhelming support. As predicted, for all four types of maintenance, relational uncertainty (with the lone exception of positivity) and interaction enjoyment emerged as predictors of maintenance even after controlling for IOS and equity. IOS also proved to be a consistent predictor in all four analyses. Equity, on the other hand, yielded few statistically significant results. These findings support the claim that the exchange approach provides only a weak explanation for why partners maintain a relationship (Ragsdale & Brandau- Brown, 2007a).

**Theoretical, Methodological and Practical Implications**

Taken as a whole, this investigation possesses meaningful theoretical, methodological, and practical implications. Theoretically, this study advances the current state of what is known about friendship maintenance and contributes to the ongoing debate regarding the motivations driving relationship maintenance. Both the relational turbulence model and interaction enjoyment approach emerged as explanations of friendship maintenance above and beyond that explained by traditional theoretical explanations (i.e., equity theory and self-expansion theory).

Further, interaction enjoyment was the strongest predictor of friendship maintenance. Among the explanations tested here, enjoyable interactions appear to be the most important factor in determining friends' desires to maintain a relationship. It is notable that interaction enjoyment is the most communication-focused predictor in comparison to the other more psychologically-oriented predictors. In other words, interaction enjoyment is a direct result of certain communicative behaviors whereas relational uncertainty, IOS, and equity are more perceptual variables. It can be concluded that regardless of one's perception and evaluation of the relationship as a whole, if a friend is fun to sit down and talk with, it is likely the relationship will still, at least to some degree, be maintained.

Interaction enjoyment clearly cannot be overlooked as an important variable to consider in future maintenance research. Burleson and Denton's similar social skills approach and Hecht's communication satisfaction inventory provided the framework in which to conceptualize this construct. However, future research is necessary in order to explore what specifically contributes to and facilitates an enjoyable interaction. There may be a number of reasons interactions are perceived as enjoyable; thus, the following tentative model may provide direction for future exploration. Different types of similarity (e.g. cognitive complexity,



attitudes, social skills; Burleson & Samter, 1994) may directly influence interaction enjoyment by facilitating more fluid and comfortable interactions. However, it is possible that another construct such as *effort*—the amount of energy or cognitive resources required by the interaction—may mediate this relationship. Similarities between friends not only reduce the effort necessary for easy and effective interactions, but “actual similarities in certain attitudes, values, interests, and behaviors enhance the quality of interpersonal interactions” (Burleson & Samter, 1996, p. 127). Thus, it is likely that interaction enjoyment can be conceptualized as more than simply effort. Interaction enjoyment appears to be more affective in nature whereas effort is a more cognitive-based construct. Once again, future investigations are necessary in order to decompose this important construct.

Additionally, the current research applied the relational turbulence model and relational uncertainty to a context other than romantic relationships. Although this study did not empirically compare the relational uncertainty measure across romantic and friendship relationships, the pattern of results is theoretically consistent with that posited by the relational turbulence model (Knobloch & Solomon, 1999). As such, this investigation established the measure’s criterion validity via the significant inverse associations with friendship maintenance behavior. Like romantic relationships, friendships can be laden with uncertainty and this uncertainty has the potential to influence relational partners’ commitment to the relationship. Thus, it may be equally important that friends “consistently update their fund of knowledge about themselves, their relational partner, and their relationship” (Berger & Bradac, 1982, p. 13). More research is necessary in order to establish the causal nature of this relationship, but, based on the current research, friendship maintenance strategies may even serve as a means of uncertainty reduction.

This investigation also offers a small, yet useful, methodological advance by refining Hecht's (1978) measure of interaction enjoyment. Specifically, the measure used here offers enhanced face validity for measuring trait interaction enjoyment. The exploratory factor analysis produced a unidimensional solution, with one factor explaining 75.3% of the total variance among items, providing some initial evidence that respondents experience such a trait in their friendships. In sum, this investigation offers a measure that may be useful to future researchers, although the measure would benefit from confirmatory factor analysis that would verify the scale structure obtained here through exploratory factor analysis.

In terms of practical application, this study helps further explain why friends choose to maintain some relationships and not others. Close friendships are vital to health, happiness, and even workplace productivity (Rath & Harter, 2012), and they offer a sense of belonging, emotional stability, opportunities for conversation, assistance, reassurance of worth and value, and personality support (Rawlins, 1992). However, individuals do not have the time, energy, or emotional resources to establish fully committed friendships with everyone they encounter. Therefore, they choose to maintain some relationships while letting others deteriorate. Research and personal experience suggest that unless relational partners make an effort to keep a relationship together, it tends to decay over time (Dindia, 2003); thus, it is important to understand what factors most influence this fate.

In light of this study, there appear to be three major factors that contribute to and help maintain a healthy friendship. First, it is recommended that friends share a communal bond. This includes sharing valued resources, possessions, perspectives, and identities (Aron et al., 2004). Second, friends benefit from minimizing uncertainty and being open and honest about their feelings regarding the friendship. If friends feel confirmed in the other's commitment to the

relationship, they are more likely to continue devoting themselves to the friendship. Third, and arguably most important, interactions with friends should be easy and enjoyable. These types of positive interactions enable friendship to be an important source of joy and affirmation.

### **Limitations**

Despite these implications, the results of this study should be interpreted with caution given several inherent limitations of the research design. Primarily, this study relied solely on self-report data from young adults. Future research should seek data from the other relational partner in the dyad in order to fully understand the nature of the relationship. Additionally, the participant sample was limited to predominantly white, middle to upper class, undergraduate students from a private university in the southwestern United States. Other theoretical explanations for friendship maintenance may be important to consider in the study of more diverse populations. Further, this study used a nonexperimental cross-sectional design, limiting the ability to advance causal claims.

In conclusion, this study sought to examine and compare different theoretical frameworks as predictors of friendship maintenance. The current findings validated previous research and contributed both theoretically and methodologically to the body of relational maintenance research. Friendship maintenance varies as a function of equity, IOS, relational uncertainty, and interaction enjoyment, and further exploration is needed in order to better understand the nature of these associations and how they differ across different types of close relationships.

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Appendix

Directions: In the following spaces, please circle or write the most appropriate response to each question. If there is a separate set of directions, please read those directions carefully and answer each question to the directions for that section of the questionnaire.

1. What is your age? \_\_\_\_\_
2. What is your biological sex (please circle one)?
  - 1 Male
  - 2 Female
3. What is your current classification in school?
 

1 Freshman	4 Senior
2 Sophomore	5 Graduate student
3 Junior	6 Other: _____
4. What is your ethnicity or race?
 

1 White	4 Native American
2 African American	5 Asian American
3 Hispanic American	6 Other (please specify): _____

Directions: At this time, please think of someone whom you would consider a [**close / casual**] friend (i.e., someone who is definitely not a [casual / close] friend). This person should not be a family member or current romantic/sexual partner. You will complete the rest of the questionnaire with this person in mind.

1. What is the sex of this friend?
  - 1 Male
  - 2 Female
2. About how old is this friend (in years)?
 

1 Less than 18 years old	5 45-54 years old
2 18-25 years old	6 55-64 years old
3 25-34 years old	7 65-75 years old
4 35-44 years old	8 More than 75 years old
3. How long have you known this friend (in years)? \_\_\_\_\_
4. Generally, would you say that this person is a local friend, or a long-distance friend?
  - 1 Local friend
  - 2 Long-distance friend

**Equity Measure (Stafford & Canary, 2006):**

Directions: Please answer the following questions:

1. Considering how much you and your friend put into your friendship, and how much you and your friend get out of it: (circle one number below)

I am getting a much better deal than my friend.						My friend is getting a much better deal.
1	2	3	4	5	6	7

2. Consider all the times when your friendship has become unbalanced and one partner has contributed more for a time. When this happens, who is more likely to contribute more? (circle one number below)

My friend is much more likely to be the one to contribute more.						I am much more likely to be the one to contribute more.
1	2	3	4	5	6	7

**Relational Uncertainty Measure (Knobloch & Solomon, 1999):**

Directions: We would like you to rate how certain you are about the degree of involvement that you have in your relationship at this time. Please note, we are not asking you to rate how much involvement there is in your relationship, but rather how certain you are about whatever degree of involvement you perceive. It might help if you first consider how much of each form of involvement is present in your relationship, and then evaluate how certain you are about that perception. Please indicate your responses using the scale below.

Completely or almost completely uncertain	Mostly uncertain	Slightly more uncertain than certain	Slightly more certain than uncertain	Mostly certain	Completely or almost completely certain
1	2	3	4	5	6

How certain are you about...

1. What you can or cannot say to each other in this friendship?	1	2	3	4	5	6
2. The boundaries for appropriate and/or inappropriate behavior in this friendship?	1	2	3	4	5	6
3. The norms for this friendship?	1	2	3	4	5	6
4. How you can or cannot behave around your friend?	1	2	3	4	5	6
5. Whether or not you and your friend feel the same way about each other?	1	2	3	4	5	6
6. How you and your friend view this friendship?	1	2	3	4	5	6
7. Whether or not your friend likes you as much as you like him or her?	1	2	3	4	5	6
8. The current status of this friendship?	1	2	3	4	5	6
9. The definition of this friendship?	1	2	3	4	5	6
10. How you and your friend would describe this friendship?	1	2	3	4	5	6



11. The state of the friendship at this time?	1	2	3	4	5	6
12. Whether or not this is a close or casual friendship?	1	2	3	4	5	6
13. Whether or not you and your friend will remain friends?	1	2	3	4	5	6
14. The future of the friendship?	1	2	3	4	5	6
15. Whether or not this friendship will end soon?	1	2	3	4	5	6
16. Where this friendship is going?	1	2	3	4	5	6

**Relational Maintenance Scale (Oswald et al., 2004):**

Directions: For the following questions, please answer using the following scale:

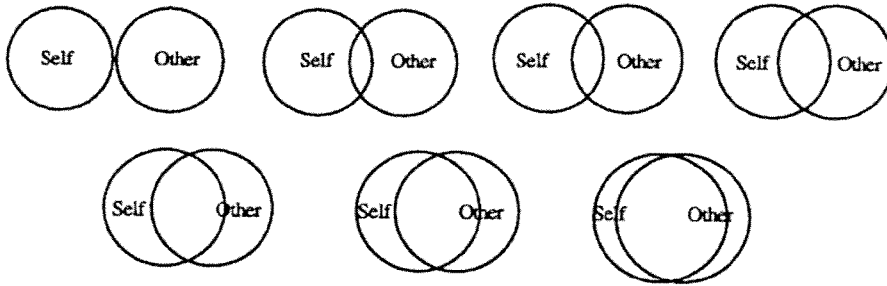
Never	Very Rarely	Rarely	Sometimes	Frequently	Very Frequently
0	1	2	3	4	5

How often do you and your friend...

1. Express thanks when one friend does something nice for the other?	0	1	2	3	4	5
2. Try to make each other laugh?	0	1	2	3	4	5
3. Share your private thoughts with each other?	0	1	2	3	4	5
4. Do favors for each other?	0	1	2	3	4	5
5. Repair misunderstandings?	0	1	2	3	4	5
6. Not return each other's messages?	0	1	2	3	4	5
7. Try to make the other person "feel good" about who they are?	0	1	2	3	4	5
8. Give advice to each other?	0	1	2	3	4	5
9. Work together on jobs or tasks?	0	1	2	3	4	5
10. Try to be upbeat and cheerful when together?	0	1	2	3	4	5
11. Support each other when one of you is going through a difficult time?	0	1	2	3	4	5
12. Have intellectually stimulating conversations?	0	1	2	3	4	5
13. Provide each other with emotional support?	0	1	2	3	4	5
14. Reminisce about things you did together in the past?	0	1	2	3	4	5
15. Show signs of affection toward each other?	0	1	2	3	4	5
16. Make an effort to spend time together even when you are busy?	0	1	2	3	4	5
17. Let each other know you want the relationship to last in the future?	0	1	2	3	4	5
18. Celebrate special occasions together?	0	1	2	3	4	5
19. Let each other know you accept them for who they are?	0	1	2	3	4	5

**IOS Closeness Scale (Aron, Aron, & Smollan, 1992):**

Directions: Please circle the picture below which best describes your relationship. In the diagrams below, you are "self" and your friend is "other."



**Communication Satisfaction (Hecht, 1976)**

Directions: Please indicate the degree to which you agree or disagree that each statement describes typical conversations with your friend.

Strongly Disagree			Undecided			Strongly Agree
1	2	3	4	5	6	7

1. I feel as if I can talk about anything with this friend.	1	2	3	4	5	6	7
2. I feel like we can laugh easily together.	1	2	3	4	5	6	7
3. Our conversations flow smoothly.	1	2	3	4	5	6	7
4. We tend to talk about things I am NOT interested in.	1	2	3	4	5	6	7
5. This friend lets me know that I am communicating effectively.	1	2	3	4	5	6	7
6. This friend expresses a lot of interest in what I have to say.	1	2	3	4	5	6	7
7. I like to have conversations with this friend	1	2	3	4	5	6	7
8. I find it easy to talk with this friend.	1	2	3	4	5	6	7