NOT ALL FRIENDS ARE CREATED EQUAL: A TYPOLOGY OF FRIENDSHIPS AND DEVELOPMENT OF A NEW SCALE

by

H. Dotan*

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* The Leon Recanati Graduate School of Business Administration, Tel Aviv University, Ramat Aviv, Tel Aviv, 69978, Israel. Email: hdotan@post.tau.ac.il

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Abstract

Research on friendship in organizations has tended to treat this relationship as a single category, assuming that all organizational friendships are identical. In this article, I argue and demonstrate that different types of friendships exist in organizations and that "not all friends are created equal." I propose and test a dimensional model that distinguishes friendships along affective, cognitive, behavioral, and instrumental dimensions. Moreover, I develop and validate a 16-item measure of friendships – the Friendship Types Scale (FTS) – using four studies. In Study 1, qualitative methods are used to investigate the types of friendships that staff members have with their colleagues. In Study 2, I utilize the findings from Study 1 to develop items for a FTS scale and use a sample of 844 US employees for construct development. In Study 3, a new sample of 679 employees is used for measure validation. In Study 4 evidence for convergent and discriminant validity is obtained. The results indicate the new scale has satisfactory psychometric properties and construct validity. Future empirical investigations using the newly developed typology and scale are detailed.

Key words: Typology of Friendships, Organizational Friendships, Scale Development

"Each friend represents a world in us,
a world possibly not born until they arrive,
and it is only by this meeting that a new world is born."
~ Anaïs Nin

Workplace friendships, besides being an important part of many people's working lives, potentially play a crucial role in micro-individual as well as macro-organizational outcomes. At the individual level, researchers have investigated how friendships at work influence such outcomes as motivation, turnover, job satisfaction, and organizational commitment (Kram & Isabella, 1985; Morrison, 2008; Riordan & Griffeth, 1995). At the organizational level, studies have focused on information and resource sharing (Kramer, 1996), informal network building and team performance (Jehn & Shah, 1997; Krackhardt & Stern, 1988), intra- and interorganizational networks and structure (Burt, 1992; Granovetter, 1985; Lincoln & Miller, 1979; Mehra, Dixon, Brass, & Robertson, 2006), and organizational efficiency (Boyd & Taylor, 1998; Fehr, 1996; Olk & Gibbons, 2010). The results of this body of work have been mixed. Some studies have found workplace friendships to have positive effects – for instance, on stress relief, creativity, job involvement, organizational commitment, and job satisfaction (Gibbons & Olk, 2003). Others have identified negative outcomes of friendship ties, including loss of focus on the task, groupthink, conflicts of interest, and the appearance of favoritism (Berman, West, & Richter, 2002), as well as the development of romantic relationships (an outcome that may be positive for the two people involved, but detrimental to organizational functioning; Homans, 1950; Quinn, 1977; Yager, 2002).

However, little is known about the types of friendships that exist in organizations. Rather, research on friendship ties in organizations has tended to treat this relationship as a single category, with no distinction being made (theoretically or operationally) between

different types of friendships. Put differently, scholars have made a critical assumption that all friendships are identical and have the same effects (Berman et al., 2002; Gibbons & Olk, 2003; Mehra et al., 2006; Morrison, 2002). Why does this matter? By collapsing all friendships into a single category and aggregating their effects, scholars may have missed important data on friendships and their consequences. Some of the effects that have been observed may appear weaker (or stronger) than they actually are, while other effects may not have been identified at all. In addition, this trend toward aggregation means that scholars may not have all the information they need to explain discrepant findings. For example, Riordan and Griffeth (1995) found a direct positive effect between friendship opportunities and job involvement, while Nielsen, Jex, and Adams (2000), examining the same relationship, found no such evidence. Nielsen et al. (2000) suggested that the inconsistent findings may reflect differences in the two studies' samples, given that their participants came from several organizations while Riordan and Griffith drew their sample from a single organization. However, it is possible that the inconsistent findings between these studies are not (or are not only) a function of the samples used, but that the *types* of friendships examined by Riordan and Griffith (1995) differed from those examined by Nielsen et al. (2000).

One reason that few studies have attempted to distinguish among different types of friendships may be that, thus far, the literature has lacked a comprehensive conceptualization of different friendship types and a valid measure to capture these differences. The current paper, therefore, addresses this research gap by (a) proposing and testing a dimensional model of friendships, where friendships are distinguished along affective, cognitive, behavioral, and instrumental lines, and (b) developing and validating a new measure of friendship types, the Friendship Types Scale (FTS). To achieve this, four separate, yet complementary investigations were conducted. In Study 1, an exploratory study, I used qualitative methods and a grounded theory approach to identify the key dimensions along

which friendships vary and the types of friendships that 25 staff members of a business school in the United States have with their colleagues. This study yielded four main friendship types[1]. In Study 2, I utilized the findings from Study 1 and quantitative methods to develop a new scale and to validate its factor structure in a sample of 844 employees. In Study 3, I used a new sample of 679 employees to cross-validate the developed FTS using confirmatory factor analysis. In Study 4, I examined the convergent and discriminant validity of the new measure using an additional sample of 180 employees. The findings confirm the need to adopt a more articulated approach to friendships that incorporates their various dimensions and that differentiates friendships by types.

Before presenting the studies and methodology, I first discuss one of the key challenges in the field of friendship, the problem of definition, and its corollary, the problem of measurement. I then review the limited friendship typologies that do exist in the literature and present my argument for a new and more comprehensive differentiation of the friendship construct.

Defining and Measuring Friendship

Scholars across various disciplines report that a key challenge in studying friendship is how to define this extremely complex and ambiguous concept. A review of the literature reveals more than a thousand definitions of friendship – "virtually as many definitions of friendships as there are social scientists studying the topic" (Fehr, 1996, p. 5). One reason for this difficulty is that friendships are voluntary relationships that are not governed by explicit rules or structures. In this, friendships stand in contrast to most other types of relationships people engage in, such as those based on kinship, business, or work, which are governed by social norms, laws, and contractual obligations.

There is some consensus about the core features of friendships. Most definitions include the notion that a friendship is an informal, voluntary relationship between individuals who share interpersonal trust and have something in common, with mutual liking and mutual commitment to invest in the relationship (Fehr, 1996; Spencer & Pahl, 2006). Berman et al. (2002) define workplace friendships along these lines, as "nonexclusive voluntary workplace relations that involve mutual trust, commitment, reciprocal liking and shared interests and values" (p. 218). Friends enjoy each other's company, share conversation and activities, and provide each other with help, support, and advice. Friends feel they can share confidential information safely and expect the other to "be there" when needed. On the other hand, the fact that individuals often use the term "friend" loosely to refer to acquaintances who don't necessarily meet the criteria generally accepted to stand at the core of friendship contributes to the difficulty of defining and studying this relationship (Spencer & Pahl, 2006). The dynamic nature of social relationships and the fact that friendships change and grow over time exacerbate these difficulties.

Given this definitional challenge, most organizational scholars seeking to measure friendships have either adopted some widely accepted definition and ignored the complexity, or have evaded the issue by not providing a definition at all (Adams, Blieszner, & de Vries, 2000). For instance, respondents may simply be asked to identify those coworkers they consider friends; a friend is therefore someone whom the individual identifies as such (e.g., Gibbons, 2004; Ibarra, 1992; Morrison, 2002). No other dimensions or aspects of the friendship relationship are generally examined in studies of friendships in organizations. A few studies that attempted to examine friendship more deeply differentiated friendship along some affective dimension or level of intimacy – for example, distinguishing between casual friends, close friends, and best friends (Sias & Cahill, 1998). However, friendships include many more elements/dimensions than simply an affective dimension. For example, Adams,

Blieszner and de Vries (2000) found that friendships include affective, cognitive, behavioral, and structural elements. Nonetheless, organizational scholars include an individual in a friendship study simply because that person is reported by others as being a friend. It is puzzling that, whereas many scholars across disciplines have difficulty defining friendships, the complexity is ignored when it comes to measuring friendships, and the most basic and simple method is adopted - asking individuals to answer a single question, whether a particular person is a friend or not. We would be able to understand and predict a lot more about friendships and their effects if we collected more data about the meaning and characteristics of this relationship. I will discuss this more fully in the context of existing typologies of friendships, below.

Existing Friendship Typologies and the Need for a New Dimensional Model

Psychologists have proposed a number of ways of differentiating between friendships. Some have focused on the *context* or *location* where the friends met or within which they interact, distinguishing between neighborhood friends, work friends, church friends, family friends, high-school friends, and, more recently, online friends (Chan & Cheng, 2004). Another approach has been to differentiate friendships by the reporting *group*. Researchers have examined friendships among men and women (Bank & Hansford, 2000; Kanter, 1977; Winstead, 1986), children and adults (Parker & de Vries, 1993; Roberto & Kimboko, 1989), members of minority and majority groups (Ibarra, 1995; Mehra, Kilduff & Brass, 1998), newcomers and veteran employees (Mollica, Gray, & Trevino, 2003), and members of different levels of an organizational hierarchy (Mao, 2006). In most of these studies, however, scholars have not attempted to distinguish between different categories or subgroups of friends within each group. For instance, in most studies of friendships by gender, all women's friendships were included in the women's friendship category, simply

because the participant reporting on her friendship was female. Friendships within the female group were not differentiated (Bank & Hansford, 2000).

Aside from the context-of-origin and reporting-group studies, most other studies that attempt to differentiate between friendships focus on the relationship's *affective* component. As described above, these studies distinguish friendships by level of intimacy using common categories – e.g., "casual friend," "good friend," and "best friend." However, intuitively, it seems clear that friendships can vary even within these affective categories, on the basis of what the friends think about each other, how they behave toward one another, and what the relationship offers the individuals involved.

Adams, Blieszner, and de Vries (2000), in a qualitative study among older adults, asked individuals about their *definitions* of a friend. Responses were coded into categories representing the elements of a friendship that participants reported were more or less important to them. Four broad categories of elements were identified: (1) cognitive processes (loyalty, trust, shared interests/values, acceptance, empathy, appreciation/respect); (2) affective processes (compatibility, care); (3) behavioral processes (self-disclosure, sociability, assistance, shared activities); and (4) structural characteristics (solidarity, homogeneity/homophily). In addition, the authors defined three proxy measures of the quality of relational processes: frequency of contact, length of acquaintance, and duration of contacts. The authors then measured the extent to which respondents defined friendship in terms of each category (as represented by the specific elements within it). The percentage of respondents defining friendship in terms of a given category varied, with 76.9% citing at least one behavioral process, 70.1% at least one cognitive process, 40.2% at least one affective process, and 29.9% at least one structural characteristic. (Respondents cited just over three elements each.) These results are pioneering in showing that friendships incorporate

affective, cognitive, behavioral, and structural dimensions, and that individuals differ with regard to the salience of each.

Adams et al., (2000) did not identify instrumental elements as part of individuals' definitions of the relationship. Might friendships also include a utilitarian or instrumental dimension? Evidence for instrumental motivations for forming and/or maintaining social ties such as friendships has been identified in the literature (see Dotan, 2009; Podolny & Baron, 1997; Portes, 1998; Putnam, 1993; Randel & Ranft, 2007). Thinking about friendships in terms of their utility or benefit is controversial; indeed, some would argue that such relationships are not "real" friendships. Nonetheless, the literature suggests that friendships may vary along this dimension as well, especially workplace friendships, which involve managing a professional task-based relationship and a personal friendship simultaneously.

Given these findings, it is apparent that typologies which distinguish friendship ties only along an affective dimension, or which merely typify the relationship based on context or group, are not sufficient. Our understanding of friendships – including their effects on the individuals involved, on other individuals or groups, and on the context in which they evolve – would benefit from a scheme that is not limited by context or by reporting group and that allows friendships to be distinguished along all relevant dimensions of the relationship, and not merely along an affective one.

A Dimensional Model of Friendship

I propose a dimensional model of friendship in which friendships are characterized along four *higher-order* dimensions. The dimensions are relevant to any friendship and are not confined to a specific context. Where appropriate, however, in the discussion below I draw on examples from workplace friendships.

My proposed four-dimensional model differs from that of Adams et al. (2000) in two respects. First, unlike Adams et al., I argue that in many contexts, including the workplace, friendships have an instrumental or utilitarian dimension. That is, the bond between the two parties may be built in part on utilitarian motivations – a sense that each party has something to offer the other beyond compatibility, shared interests, or an ability to meet an affective need (Podolny & Baron, 1997; Portes, 1998; Randel & Ranft, 2007). Second, I suggest that the structural characteristics offered by Adams et al. (solidarity, homogeneity) help explain the attraction between two people, but are not in themselves meaningful dimensions of friendships. Two people who are very much alike may or may not become good friends, and if they do, they will likely explain their friendship on the basis of shared interests, compatibility, and other elements that fall under the affective, cognitive, and behavioral dimensions. Similarly, the proxy measures of relationship quality (frequency of contact, etc.) are merely external reflections of the inner processes of the friendship. Hence, the proposed four-dimensional model of friendship comprises affective, cognitive, behavioral, and instrumental dimensions, with different individuals (and different friendships) varying in the importance of each one.

The dimensions I propose differ also somewhat in content from those of Adams et al. For example, Adams et al. regard empathy as a cognitive element, whereas in my view empathy is an affective process. Resolving such questions is beyond the scope of this paper. For the present, I simply characterize my proposed dimensions broadly and in brief, as follows:

Affective dimension.[2] The affective dimension is the extent to which interactions between the friends focus on empathic listening, sharing of emotions, disclosure of intimate feelings and information, and expressing sympathy and support. A friendship high in the affective dimension is one in which the friends are not afraid to show their true feelings, and

in which they attempt to strengthen each other's confidence or self-concept via expressions of emotional support.

Cognitive dimension. The cognitive dimension is the extent to which interactions between the friends include the exchange of ideas and information, whether this involves talking about politics, sports, or work-related issues. Friends who score high in the cognitive dimension will go to each other for advice, to bounce ideas off, or because they feel the need for someone to validate their thinking processes – or simply because they take pleasure in discussing topics that interest them with like-minded people. Such exchanges are likely to focus on sharing information and opinions more than personal feelings. Hence, friendships that are high in the cognitive dimension may also be low in the affective dimension (though this need not always be the case).[3]

Behavioral dimension. The behavioral dimension is where the friends affirm their friendship through their actions, whether by doing things together or by doing things for each other. Shared activities may be occasional (e.g., going out to dinner and the theater) or regular (going to the gym, playing golf or basketball on weekends, meeting at work for smoking breaks). Actions in support of the other may be practical (offering a lift to the airport) or emotional (phoning when a friend is going through hard times). The behavioral dimension may overlap with the affective and/or cognitive dimensions, and the two may be difficult to disentangle in some cases. If two friends meet each week to talk over coffee, their regular physical encounters (behavioral dimension) and their sharing of feelings (affective dimension) reinforce each other, with each helping to maintain the friendship.

Instrumental dimension. The instrumental dimension is defined here to include only actions involving a conscious cost/benefit analysis, where one or both parties receive some benefit from the friendship that serves to fulfill some self-interest. In a workplace friendship, these calculated benefits are likely to involve personal benefits as well as benefits to the job

or career, including access to resources/information, expectations of promotion, more choice with regard to work-related tasks, network-related benefits, exposure, and reputational power (Krackhardt & Kilduff, 1990). While workplace friendships high in the instrumental dimension may logically involve individuals of differing organizational status (e.g., a subordinate and a supervisor), high-utility friendships may take place horizontally as well (i.e., between peers).[4]

The model proposes that friendships vary along these four dimensions and that such variance leads to substantially different types of friendships. For example, a friendship that is high in the affective and behavioral dimensions and low in the cognitive and instrumental dimensions will look very different from a friendship that is high in the latter and low in the former. Table 1 summarizes the 16 potential combinations among the four dimensions, where each combination could, in theory, reflect a specific type of friendship.

Before we continue, a few words on terminology are warranted. It should be clear from the outset that in speaking of friendship "types," I do not mean that all real friendships fall into distinct, mutually exclusive categories. Clearly, in practice, the boundaries between different types are often blurred. Rather, what I aim to describe here is a set of "archetypes" or theoretical reference points against which observable data can be compared and evaluated (Blalock, 1969). A typology thus differs from a taxonomy, which aims to arrange items into conceptually firm, mutually exclusive classes (Doty & Glick, 1994). In the typology proposed here, therefore, the types are constructs designed to enable scholars to discuss and analyze real friendships using a common language and shared analytical tools.

Although theoretically there are 16 archetypal forms of friendship, some of these theoretical types may be more likely than others to find expression in the real world. Determining which these are requires empirical investigation of whether and how real friendships vary along the proposed dimensions. As the current research is concerned with

friendships within organizations, Study 1, an exploratory qualitative study, was designed to produce a preliminary typology of workplace friendships.

Study 1: Identifying Variance in Friendships Using a Grounded Theory Approach

As noted above, no-one has empirically examined (or attempted to distinguish) the types of friendships that exist in organizations. The current exploratory study employs a grounded-theory approach and inductive methods (Glaser & Strauss, 1967; Strauss & Corbin, 1990) to collect and analyze interview data from staff members at a business school in the western United States. The purpose of the study was to identify the types of friendships that participants report having with their colleagues, as defined by their variance along *higher-order* affective, cognitive, behavioral, and instrumental dimensions.

For reasons of space, the methodology for Study 1 is described only briefly in this article. Further details about the qualitative data and the analyses are available from the author upon request.

Method

Sample and Procedure

The participants for this study were 25 full-time university staff members at a medium-sized business school. The sample included staff in various capacities (e.g., secretaries, directors of administrative departments). The sample was a restricted convenience sample, and the types of friendships found may be biased given the context of a university setting. However, it was assumed that findings from this exploratory study would illuminate the types of friendship found in other organizations as well as other non-work contexts.

The key criterion for selection of participants was that the individual self-identified as having at least one friend at work. For the purposes of this study, a “friend” is someone

whom the individual identifies as such – the common practice when measuring friendships in organizations (Gibbons, 2004; Mehra et al., 2006). Staff members were randomly selected from the business school's directory using a computer random number generator. An initial sample of 40 administrative staff received an email explaining the study and inquiring if the recipient had a friend at work. If the answer was affirmative, participation in the research was requested. The friends of participants were not interviewed, and the sample included only one individual in any friend pair. Participation was completely voluntary, and participants received no compensation for taking part in the study. Of the 40 individuals contacted, 6 reported that they did not have a friend at work, 2 did not respond, and 4 did not wish to participate, bringing the sample size to 28. As interviews began, 3 additional participants indicated that they did not have a friend at work and were excluded, reducing the sample size to 25.

Nine participants were male (36%) and 16 were female (64%). The mean age was 38, with a range of 24 to 56. Participants' mean tenure at the workplace was 8.65 years (*SD* = 9.49), and mean longevity of the friendship was 1.9 years (*SD* = 1.66). Table 2 presents the sample's descriptive statistics.

Interview

Each participant was interviewed by the same researcher. The length of the interviews ranged from 1 to 3 hours, with an average interview time of 90 minutes. Interviews were recorded and transcribed (verbatim) with the participants' permission.

Participants were asked about a relationship that had changed from a co-worker relationship to a friendship, and were questioned regarding their closest friendship at the workplace. Friendships that had existed prior to arriving at the organization were excluded to avoid the complexity of a prior friendship relationship. The rationale for asking respondents to discuss their closest friendship was to minimize variance on the types of friendships

between participants. The idea was to get participants to think of the closest friendship they had at work, regardless of how they described the friendship. In addition, this prompt assisted in cases where participants had more than one work friend. Participants were asked open-ended questions about their friend, which allowed for all the higher-order dimensions of friendships (affective, cognitive, behavioral, instrumental) and proxy measures (e.g. length of friendship, frequency of interaction, location of interaction) to be raised and discussed. Questions and prompts included: "Please describe your relationship with this person"; "How would you define your friendship with this person?"; "What does this friend mean to you?"; "What types of support or other factors do you get from this person that are important to you?" Participants were also asked to complete the following sentence: “When we meet, we mostly….” A few questions focused on the formation of the friendship, such as "There are many people in your organization with whom you could have become friends. Why do you think you become friends specifically with this person?” and “Why did you want to be friends instead of just co-workers?”

Data Analysis

The data analysis followed the grounded theory approach of Glaser and Strauss (1967) and used Strauss and Corbin’s (1990) coding methodology. Each participant’s transcript was reviewed to identify variance along the four higher-order dimensions and other meaningful information by breaking down the respondent’s sentences into discrete ideas and giving each item a name (conceptualization). The principal investigator and two research assistants analyzed the data using the following three stages: initial coding, focusing of categories, and validation of categories. In the initial coding stage (Lofland & Lofland, 1984), each participant’s responses were examined separately to obtain tentative categories of friendship types. For the entire sample, a total of eight different categories emerged. For example, when Participants 1, 2, and 13 all explained that their friendship is based on

"Safety/Trust", I counted this as one item. Theoretical saturation (Glaser & Strauss, 1967), the point where no new important information was gleaned, was reached after seventeen interviewees. This finding is consistent with previous findings that "saturation of categories in interpretive research is typically reached with approximately twenty participants" (Sias et al., 2004, p. 325). In the second stage, *focusing categories*, the categories derived for each participant were compared with those of other participants to see whether and how they were related and we began to collapse tentative categories into more general ones. A crucial part of this stage was that we examined categories in terms of their properties and several *lower order* dimensions. The lower-order dimensions help in clarifying the similarities and differences between the friendship types and incorporate the *higher-order* affective, cognitive, behavioral and instrumental aspects of the relationship, as well as the proxy measures. For example, a participant whose response we grouped under the category "Sanity Check" explained: "*We continued to hang around each other mainly for validation and it became a habit especially since we made fun of it…. we don't meet very much, say once a month, but we check in and get the affirmation.*" "*We don't meet very much*" inspired the dimension "*Frequency of Interaction"* and the dimensional range [High, Moderate, Low] (See Table 3 and the definitions of each dimension below). The final *lower-order* dimensions and proxy measures (with the dimensional range in parentheses) along which friendship types were distinguished are:

1. **Most prominent exchange**. Do the friends' interactions primarily involve information sharing [cognitive dimension], sharing of emotions [affective dimension], doing things together or for each other [behavioral dimension], and/or deriving benefit from the other [instrumental dimension]?
2. **Cognitive exchange.** What is the level of informational exchange between the friends (both work and non-work related)? [High, Low][5]

3. **Emotional intensity**. What is the level of emotional intensity in the friendship? [High, Low]
4. **Socializing/Activities**. How much time do the friends spend doing things together and for each other? [High, Low]
5. **Support/Utility**. What does the friend get out of the friendship – emotional support [affective dimension], advice/information [cognitive dimension], positive social interactions [behavioral dimension], and/or work-related benefits, such as preferential treatment [instrumental dimension]?
6. **Meeting place**. Where do the individuals generally meet? [Home (private residence), Neutral (public place such as a restaurant), Work (shared workplace)]
7. **Frequency of interaction**. How often do the friends interact with one another? [High (daily), Moderate (weekly), Low (once a month or less)]
8. **Time known before friendship**. How long did the individuals know each other (as coworkers) before they became friends? [Long, Medium, Short]
9. **Relevance/Influence of the work context**. To what degree does the work setting and context influence the friendship? (E.g., did the friends get to know each other while working together on a project? Do they have work-related concerns in common? Would they still be friends if they didn't work together? [High, Moderate, Low]
10. **On purpose/By chance**. Did one or both individuals seek out the friendship, or did it develop by chance? [On purpose/By chance]
11. **Trigger**. Did the participant enter into the friendship mainly because of "push" factors (i.e., a desire to fulfil an internal need or want) or "pull" factors (something specific about the other person)? [Push/Pull]

In the final stage of the data analysis process, *category validation*, we compared all the potential friendship type categories derived during the second stage in a between-group

comparison, examining the similarities and differences between each type to find the most parsimonious framework in which each type identified was theoretically distinct. This stage of the analysis produced four friendship types which accounted for all the variations described by participants.

Results

The data analyses revealed four key types of friendships, which are referred to here as (1) Safety/Trust, (2) Missing Role, (3) Sanity Check, and (4) Work-Values/Life-Interests Similarity. Below I elaborate on each type and compare them along the eleven lower-order dimensions (detailed above) to clarify the theoretical distinctions among them. See Tables 3 and 4 for summaries and quotations from participants.

Safety/Trust. This type of friendship is mainly affective or emotional in nature, and most exchanges between the friend pair are affective. The friendship is based on an internal feeling of trust and security that develops first with regard to work-related tasks and responsibilities, and then extends to other areas of life. Participants in this category indicated they felt safe sharing both confidential work-related information and other intimate information with their friends, even if this made them vulnerable.

On average, participants in this category were coworkers for a fairly long time, 18 months, before the relationship changed to friendship. This interval implies that trust developed over time and through the medium of work-related experiences. The workplace as a context appears to have only a moderate to low influence on this type of friendship, because the feelings of at least one partner in the friendship originate from a psychological need for safety (Gagné & Deci, 2005; Maslow, 1970), which may or may not be influenced by work. If we refer back to the theoretical types in Table 1, Safety/Trust represents an example of type 13, where the affective and cognitive dimensions are high and the behavioral and instrumental dimensions are low.

Missing Role. In another affect-based type of friendship, one individual resembles some important figure or role model in another person's life: a mother or father figure, a child, a sibling, or even a past version of him- or herself. The friend thus "replaces" something missing or perceived as lost: "the sister I never had." The "Missing Role" friend is someone with whom the participant feels a deep, emotional connection. Most respondents in this category reported that they were missing someone in their life, but two mentioned that they were filling a hole in another's life as mentors or providers of support and nurturance. An examination of the demographic data reveals that participants who reported the Missing Role to be a mother or a father figure tended to be younger than their friend by 11 years on average, implying that age may act as a symbol.

The workplace as a context has a rather low influence on this type of friendship, because the Missing Role relates to a basic human need rather than a work-related need. It is likely that such friendships develop at work simply because full-time employees spend most of their waking hours at the workplace, combined with the fact that the workplace offers the opportunity to meet many different people, including people in varying age groups. Again, if we refer back to the theoretical friendship types, the Missing Role represents an example of theoretical type 9, where affect is high and the rest of the dimensions are low.

Sanity Check. In this type of friendship, which is cognitive in nature, most exchanges between the friend pair are informational, and tend to involve one of the friends seeking reassurance about their way of thinking or their view of a specific situation, whether work-related or personal. While this reassurance is generally sought in confidence, the exchange is nonetheless primarily informational rather than affective. Several participants reported that because the issues they want to talk about are often work-related, only a work friend would be sufficiently familiar with the work setting, politics, and culture to be of help. In addition, respondents reported that they sought the friendship relationship purposely and consciously.

On average, participants reported that they and their friend were coworkers for two and a half years before their relationship developed into a friendship. The long interval between the pair's meeting and the onset of the friendship implies that the participants felt the need to know the other person quite well before allowing the relationship to deepen. However, once the friendship developed, respondents indicated that they relied on the other person for reassurance fairly frequently, and especially when something of importance was happening in their work life. Participants mentioned that they relied on their friend to deliver the needed validation almost immediately, implying some dependency on the other to satisfy an internal cognitive need. Finally, it appears that communication between the friends tended to be casual.

The work context is a fertile ground for development of a Sanity Check type of friendship. First, it is often an important work event that triggers the need for a Sanity Check; and second, individuals who want friendships of this sort seem to find each other among long-time colleagues who can understand their concerns. With regard to the theoretical friendship types, Sanity Check friendships represent type 5, where cognition is high and all the other dimensions are low.

Work-Values/Life-Interests Similarity (WVLI Similarity). This type of friendship differs somewhat from the others, as it focuses on the characteristics of the dyad or pair of friends rather than on the individual. Most participants in this category reported that they first realized they shared work values and ethics (work-values similarity) with the other and then learned they also shared similar interests and non-work-related values (life-interests similarity). Participants reported that after learning of these work-related similarities, they wanted to spend more time with the other person both at work and outside it. The work context, therefore, plays a crucial role in this friendship. The friendship was not sought out intentionally; instead, individuals were first brought into contact by the work setting (i.e., by

chance) and, as they worked together, they become aware of similar work-related or other values. They were not internally motivated to pursue the friendship for a specific reason.

On average, respondents in this category were coworkers for a relatively short time (six months) before becoming friends. They thus did not require time to learn about each other or to develop trust or intimacy. The friendships in this category revolved mainly around doing things together and acting upon common interests after work hours. WVLI Similarity is thus an example of theoretical friendship type 3, where the behavioral dimension is high and the other dimensions are low.

Discussion

Overall, the results of this exploratory qualitative study, which investigated individuals' perceptions of their friendships at work, suggests that friendships vary along several dimensions, leading to identifiable types. Specifically, the results of Study 1 identified four types of friendships which vary along three higher-order dimensions – affective, cognitive, and behavioral. The four types all scored low on the dimension of instrumentality. As mentioned, evidence of instrumental motivations for forming and/or maintaining social ties has been identified by past researchers (see Podolny & Baron, 1997; Portes, 1998; Putnam, 1993; Randel & Ranft, 2007). It is possible that, indeed, none of the participants in Study 1 sought or received instrumental benefits (such as preferential treatment at work) from the friendships they described. However, it is also possible that respondents did seek or receive such benefits, but failed to report them. Given the widespread stigma attached to the notion of “using” friends, such a failure can be readily explained by social desirability bias, or even self-deception.

With this in mind, the next three studies were designed with the goals of examining whether the four types of friendships identified in Study 1 could be generalized to other

organizational settings and contexts (Study 2), and developing and validating a new scale for measuring types of friendships (Studies 2, 3, and 4).

Study 2: Generalization of Study 1 and Development of a Friendship Types Scale (FTS)

Study 2 aimed to develop a scale that would enable comprehensive assessment and measurement of friendships based on delineation into types, as described above. The study also aimed to examine whether the friendships identified in Study 1 (Missing Role, Sanity Check, Safety/Trust, and WVLI Similarity) are also evident in a sample of 844 US employees. To achieve these ends, the method used was an online survey which included both closed-ended and open-ended questions.

Method

Initial Scale Development

The method used for scale development followed the best practices approach described by Hinkin (1995) and the stages outlined by Schwab (1980). In Stage 1, individual items that capture each content domain are derived. In Stage 2, the items are combined to construct an initial version of the scale, which is then subjected to reliability assessment. Stages 1 and 2 are described here. Stage 3, in which the measures are evaluated for validity and reliability, was conducted in Studies 3 and 4, using two different samples.

In stage 1, a deductive approach was used to generate items so as to fully capture the content domain of each of the four friendship types identified in Study 1, plus a potential instrumental-based friendship type. A deductive approach was appropriate since there was a theoretical rationale on which to base the items (described in Study 1). The items were developed using the original qualitative data from Study 1 as well as by reviewing relevant literature where appropriate, especially with regard to those items intended to capture a

potential instrumental-based friendship. Initially, a total of 60 items were derived: ten for each of the five types or content domains, and an additional 10 items designed to tap other domains or types not related to those derived from Study 1 or suggested specifically in the literature. Examples of these stand-alone items are: "I was interested in a romantic relationship with him/her" (romantic-based friendship); "We both dislike the same third person in the organization" (a friendship based on a common enemy); and "I knew I could count on him to be my lunch buddy" (lunch friend). Agreement between the researchers (the principal investigator and two research assistants) was used as the main criterion for the inclusion of items. If at least one researcher disagreed, the item was excluded.

To examine the content validity of the derived items, we followed the approach recommended by MacKenzie, Podsakoff, and Fetter (1991) and by DeVellis (2003). Specifically, we asked 15 faculty members and doctoral students in the management department of a US business school to assign each randomly ordered item to one of the six categories (Missing Role, Sanity Check, Safety/Trust, WVLI Similarity, Instrumental-type friendship, and “Other”). Twenty-one items that were not assigned to the appropriate a priori category 90% of the time were dropped, and some of those remaining were modified to improve their clarity and readability as well as content validity.

The initial survey thus comprised 29 items reflecting affective, cognitive, behavioral, and instrumental dimensions of friendships. A 7-point Likert scale was used, with scores ranging from 1 (Strongly disagree) to 7 (Strongly agree), following findings that coefficient alpha reliability is optimal with 5-7 point Likert scales (Bandalos & Enders, 1996). In addition, several open-ended questions gave participants the opportunity to introduce information that might lead to the identification of other types of friendships.

Survey Procedure and Sample

The participants for this study were employees of a diverse set of US business organizations of various sizes, including department stores, chemical companies, and financial firms. To meet the criteria for participation, employees had to be 18 to 65 years old and working at least 20 hours per week in the same organization. The 20 hours/week minimum was based on the rationale that many friendships take time to form (Fehr, 2008), and that individuals will more likely form friendships at work if they spend a lot of time there and if the organization and/or job are important in their lives. A private professional company that specializes in online survey administration was employed to distribute the survey to a random national sample of workers in various organizations throughout the United States. The company sent 20,000 solicitations to individuals drawn randomly from a nationwide panel of 1,000,000 adults 18 years or older who had previously expressed interest in participating in research projects. The firm estimates that at least 60 percent of their electronic solicitations are filtered out by SPAM blockers or are inadvertently deleted by respondents; thus, the initial solicitation was received by 8,000 potential respondents. Of these, 2,088 individuals expressed interest in participating in the survey, but only 1,057 (50.6%) met the criteria for participation. Of these 1,057 participants, 844 had at least one work friend, and their responses were used in the analysis. Participants were compensated by the company in the form of "survey cash." To encourage respondents to answer honestly, no names were collected and participants were ensured that their responses would be anonymous.

As in Study 1, a friend was defined as someone whom the individual identifies as such. Participants were asked to report if they had at least one friend at work, and how many work friends they had, with the exclusion of friendships that had existed prior to arriving at the organization. They were then asked to think of their *closest* friendship at the workplace and answer a series of questions about the affective, cognitive, behavioral, and instrumental

aspects of that friendship, captured by the scale items and some open-ended questions. The rationale for asking respondents to discuss only their closest friendship was to maximize the response rate. Moreover, researchers have shown that the closest friendship has the most influence on the individual in terms of influencing job attitudes and outcomes (Haythornthwaite & Wellman, 1998; Krackhardt & Porter, 1985).

The survey was set up so that participants could not move on to the next question without completing the current one, and only fully completed surveys were eligible for this research. All 844 participants completed the entire survey. Of the 844 participants, 56% were male, and 53% were married. Respondents were fairly evenly distributed in terms of age, with 14% aged 18 to 25 years, 26% aged 26 to 35, 26.5% aged 36 to 45, and 25% aged 46 to 55. In terms of tenure, 17% of the participants had been with their company for less than 1 year; 24% had been with the company 1 to 2 years; 20% had been there for 3 to 5 years; 18% had been for 5 to 10 years; and 21% had been with the company for more than 10 years. Table 5 presents descriptive statistics and zero-order correlations of the sample.

Analytical Procedure: Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was conducted on the proposed model, which consisted of a first-order, five-factor structure. Specifically, the model comprised four latent variables representing the four friendship types (Sanity Check, Safety/Trust, WVLI Similarity, and Missing Role), and an additional fifth latent variable, "Job instrumentality," representing a potential instrumental-based friendship. Structural equation modeling (SEM) was employed, using the statistical package EQS program Version 6 (Bentler, 2002). The analyses were performed on variance-covariance matrices. The variables in the data were multivariately non-normally distributed, with a Mardia's normalized multivariate kurtosis estimate of 64.71 ($p < .001$). To overcome this violation of SEM assumptions, the maximum-likelihood estimation method with robust standard errors was used, together with Satorra and

Bentler's (1994) rescaled chi-square statistic. Following recommendations of Hu and Bentler (1999), fit indexes of two types are reported: a Non-Normed Fit Index (NNFI) and a Comparative Fit Index (CFI), with two indexes of misfit: Root Mean-Square Error of Approximation (RMSEA) and Standardized Root Mean-Square Residual (SRMR). NNFI and CFI results close to or above 0.95, combined with a RMSEA below 0.06 and an SRMR below .08, indicate acceptable fit.

Results

The initial CFA model did not fit the data well, as shown by the indices: scaled χ^2 (424, N = 844) = 2149.49, p < .001, NNFI = .80, CFI = .82, SRMR = .11, and RMSEA = .069. A close look at the diagnostic data revealed that the WVLI Similarity items contributed heavily to the misfit: many of these items were responsible for the largest values in the residuals matrix, many of them were poorly loaded on the similarity factor, and the majority significantly cross-loaded on additional factors. Consequently, the similarity items were deleted from the analysis. The modified CFA model, while an improvement, also did not fit the data well, with scaled χ^2 (183, N = 844) = 981.15, p < .001, NNFI = .87, CFI = .88, SRMR = .09, and RMSEA = .072. Inspection of residual covariances suggested that three items were responsible for the misfit. After these items were omitted from the analysis, a Lagrange-Multiplier test suggested that the model fit could be significantly improved by allowing cross-loading of items 42 ("I trust he/she would protect me and my interests") and 32 ("He/she could help me get to where I want in my career") on the Sanity Check factor in addition to their original Safety/Trust and Job Instrumentality factors. After these modifications, the model fit the data reasonably well, with scaled χ^2(127, N = 844) = 504.00, p < .001, NNFI = .92, CFI = .94, SRMR = .06, and RMSEA = .059.

Given the results of the CFA, four factors, each with four items, were retained: Sanity Check (Factor 1); Safety/Trust (Factor 2); Job Instrumentality (Factor 3); and Missing Role

(Factor 4). A detailed conceptual inspection of the items revealed that the items that were theoretically meant to load together did in fact load together, confirming the deductive development of each friendship type. Factor 1 assesses the extent to which the friendship is based on a need for cognitive confirmation/validation; Factor 2 assesses the extent to which the friendship is based on a feeling of safety, trust, and sharing of intimate feelings and confidential information; Factor 3 assesses the extent to which the friendship is based on utilitarian considerations and career-related benefits; and Factor 4 assesses the extent to which the friendship is based on satisfying a missing role in one's life. As discussed, a fifth factor, for "WVLI Similarity," was not validated by the CFA. Moreover, many of the items loaded across factors, suggesting that similarity may be shared across all the friendship types. (This will be addressed in the general discussion section of this article.) Cronbach's alpha for each factor indicated good internal reliability (Nunnally, 1978): Factor 1 (Sanity Check), $\alpha = 0.83$; Factor 2 (Safety/Trust), $\alpha = 0.87$; Factor 3 (Job Instrumentality), $\alpha = 0.78$; and Factor 4 (Missing Role), $\alpha = 0.82$. The final items of the four-factor friendship scale (FTS) are presented in Table 6.

Studies 3 and 4 were conducted with two new samples to confirm the aforementioned factor structure and the scale's convergent and discriminant validity.

Study 3: Validation of the Friendship Types Scale (FTS)

Method

Sample and Procedure

An additional CFA using SEM was performed to cross-validate the 16-item scale derived in Study 2, using a new sample of 679 individuals. The method described in Study 2 was also used to distribute the survey to an additional random sample of employees in the United States, with the same criteria for participation. Of the 8,000 potential respondents,

2,255 expressed interest in participating, of whom 1,156 (51.3%) met the participation criteria. Of these, 877 (76%) had at least one friend at work and were eligible to participate. However, 198 respondents either dropped out of the survey in the middle or included unusable data (e.g., dots, dashes, or numbers) in order to continue to the next question. These were excluded from the analyses, leaving a final sample of 679 completed surveys.

Of the final respondents, 68% were women and 55% were married. In terms of age, 17% were 26 to 35; 27% were 36 to 45; and 37% were 46 to 55. Table 7 presents descriptive statistics and zero-order correlations of the sample.

Confirmatory factor analysis was conducted on the proposed model from Study 2, which consisted of a first-order four-factor structure with four latent variables (Sanity Check, Safety/Trust, Job Instrumentality, and Missing Role), with the observed variables loading in accordance with the CFA conducted in Study 2. The analytical approach described in Study 2 was also employed in Study 3.[6]

Results

A CFA of the 16 items yielded a reasonable fit for a first-order four-factor structure comprising the proposed four latent variables, with scaled $\chi^2(127, N = 679) = 413.95$, $p < .001$, NNFI = .93, CFI = .94, SRMR = .06, and RMSEA = .058. The Cronbach's alphas for each friendship type were as follows: Sanity Check, 0.87; Safety/Trust, 0.85; Missing Role, 0.87; and Job Instrumentality, 0.82. These indicated good internal reliability (Nunnally, 1978).

Study 3 confirmed the aforementioned four-factor structure. Consequently, the 16-item FTS was used in Study 4 to investigate the convergent and discriminate validity of the new scale.

Study 4: Convergent and Discriminant Validity of the FTS

Convergent and discriminant validity ensure that a scale measures meaningful constructs. Convergent validity is established by examining the relationship between the scale under study and scales for conceptually similar constructs; positive correlations indicate convergent validity. Discriminant validity is established by findings of low to null correlations between the scale being tested and scales for conceptually dissimilar constructs (Campbell & Fiske, 1959; Hinkin, 1998).

Convergent Validity

In the present case, since no other measures of friendship types exist, whether in organizational settings or other contexts, convergent validity is somewhat difficult to demonstrate. However, scales for a number of other constructs that are related to friendship can serve as targets for comparison. These include 1) the Social Provision scale (SPS), developed by Cutrona and Russell (1987) based on Weiss (1974); 2) the Social Support scale (Kim, Sherman, & Taylor, 2008; Sherbourne & Stewart, 1991; Wills, 1991); and 3) Nielsen et al.'s (2000) two-dimensional Workplace Friendship scale, which measures the opportunity for and prevalence of friendships in the workplace. It is also possible that individuals with different personalities may form different types of friendships (Digman, 1997). Therefore, another potential construct that may be related is personality. I will therefore examine the relationship between the FTS and the most commonly used measure of personality, the Big Five NEO-FFI measure (Costa & McCrea, 1992).

Below, I describe the four constructs (social provision, social support, friendship prevalence, and personality) and their scales, followed in each case by a brief summary of what we can expect from comparing these scales against the FTS.

Social Provisions

Weiss (1974) suggested that people engage in social interactions in order to meet several types of needs, which he termed social provisions. Weiss identified six such

provisions: attachment, social integration, reassurance of worth, sense of reliable alliance, guidance, and opportunity for nurturance. *Attachment* is emotional closeness, which produces a sense of security and comfort. In the presence of attachment-providing relationships, individuals feel safe and at home. *Social integration* is the experience of being part of a group or network with shared interests, attitudes, information, and interpretations of experience. *Reassurance of worth* is recognition that the individual is competent and valued. *Sense of reliable alliance* is assurance that others will offer help and support at times of need. *Guidance* refers to advice or emotional support when needed, especially during times of stress. Finally, *opportunity for nurturance* refers to the feeling of being needed by others. Weiss argued that different types of relationships (lover, parent, other kin) are likely to satisfy different kinds of needs. For example, being a parent provides the opportunity for nurturance. While some of these provisions can be found at home, others must be met through social relationships such as friendships (Hays, 1985). Cutrona and Russell's (1987) Social Provisions scale has been reported to be a reliable and valid measure of social provisions, with coefficient alphas as high as 0.94 (Mancini & Blieszner, 1989).

The Social Provisions scale measures *needs* that a friendship has the potential to satisfy (Cutrona & Russell, 1987; Weiss, 1974), while the FTS measures *types* of friendship as defined by the dimensions of the relationship. Given that individuals may form friendships for the purpose of satisfying various affective, cognitive, or instrumental needs, one would expect the different types of friendships captured under the FTS to correlate positively with the relevant provisions in the Social Provisions scale. Specifically, it seems likely that Safety/Trust-type friendships will align with Weiss's Attachment and Guidance provisions, as both involve trust, guidance, and emotional support. Missing Role friendships may be related to Weiss's Guidance provision, at least for individuals seeking someone to fill a hole left by, say, a missing parent or older sibling. For the role-filler in those friendships, the

Missing Role friendship may align with Weiss's need for nurturance provision (these may include friends who serve as substitutes for someone in a nurturing role, such as a parent, or individuals who befriend someone they perceive as a younger version of themselves). Individuals in a Sanity Check-based friendship have a cognitive need for validation which resembles Weiss's Reassurance of worth provision. Finally, Job Instrumentality is based on the idea that workers form friendships with others who can leverage them job-related benefits; we can expect this to be related to the sense of reliable alliance provision.

Social Support

Social support is commonly defined as "the perception or experience that one is loved and cared for, esteemed and valued, and part of a social network of mutual assistance and obligations" (Kim et al., 2008, p. 355). Five types of social support have generally been examined: information support, emotional support, instrumental/tangible support, positive social interaction, and affectionate support. *Information support* is guidance that helps the individual better understand a situation or event and the strategies that can be used to deal with it. *Emotional support* is the warmth and kindness that helps the individual feel valued and cared for. *Instrumental/Tangible support* encompasses concrete support in the form of services or material goods. *Positive social interaction* refers to the presence of companions to socialize and have fun with. Finally, *affectionate support* refers to the love and nurturance derived from close relationships (Kim et al., 2008).

Friends at work are often providers of these different types of social support. Hence, specific friendship types are expected to be positively related to particular types of social support. Specifically, we can expect the more affective-based friendships, namely Safety/Trust and Missing Role, to be most highly correlated with the emotional and affectionate support subscales of the social support measure. Sanity Check is likely to be most highly related to the information support subscale, and Job Instrumentality to the

tangible support subscale. Since all friendships are expected to be a source of positive social interactions, it is not expected that a specific friendship type will be uniquely related to this type of support.

Friendship Prevalence

Nielsen et al. (2000) developed a workplace friendship scale that measures two dimensions: Friendship Opportunity and Friendship Prevalence. Friendship opportunity is the availability of friendships in the workplace, and friendship prevalence is the existence of friendships at work. Given that the FTS measures the types of friendships that exist, it is expected that all the types of friendships will be strongly correlated with friendship prevalence.

Personality

Research has shown that individuals with different personality traits exert different types of social behaviors (Digman, 1997; Pervin et al, 2005). For example, Digman (1997) used the most commonly used measure of personality, the Big Five NEO-FFI measure (Costa & McCrea, 1992) that distinguishes among five different dimensions of personality namely: extroversion, agreeableness, open to experiences, conscientiousness, and emotional stability, and found that three out of the five traits: conscientiousness, agreeableness and emotional stability were positively related to effective social interaction. Similarly, Jensen-Campbell, (2002) found that agreeableness and extroversion were positively related to friendship formation at work. Given these findings, I therefore expect that individuals with different personalities will differ with respect to the type of friendships that they form at work.

Discriminant Validity

Discriminant validity means that constructs which are assumed to be unrelated are indeed so – i.e., the correlations between them are negligible. In the current study, the FTS was examined in relation to two variables: education and tenure. To the best of my

knowledge, there is no evidence in the literature on workplace friendships that individuals who come from different educational backgrounds differ with respect to their friendships. Thus, I expect negligible correlations between education and FTS. In addition, research on workplace friendships has identified no correlations between tenure and workplace friendships (Song, 2006). Therefore, I also expect negligible correlations between the FTS and tenure.

Methods and Sample

Data were collected from a new sample of 180 employees in the United States. The same professional survey firm and method described in Studies 2 and 3 were used to distribute the survey. Participants worked at least 20 hours a week in the same organization, were between the ages of 18 and 65, and had a least one friend at work. All participants completed the entire survey. Of the 180 participants, 47% were female and 51% were married. Thirty-nine percent were under age 35, 22% were aged 36 to 45, 21% were aged 46 to 55, and 16% were aged 56 to 65. See Table 8 for descriptive statistics, correlations and reliability statistics.

Measures

Social provisions. The 24-item scale developed by Cutrona and Russell (1987) was used to measure social provisions. Cronbach's alphas were as follows: Attachment, 0.78; Social integration, 0.65; Reassurance of worth, 0.71; Sense of reliable alliance, 0.72; guidance, 0.73; and Opportunity for nurturance, 0.73.

Social support. The 19-item MOS-SSS (Sherbourne & Stewart, 1991) was used to measure social support. This scale assesses the perceived availability of five types of social support: emotional, informational, tangible, positive social interaction, and affectionate. (The original MOS-SSS scale combined emotional and informational support, but as no theoretical reasoning to do so was found, these were not combined here.) Cronbach's alphas were as

follows: Informational, 0.86; Emotional, 0.86, Tangible, 0.89, Positive Social Interaction, 0.82, and Affectionate, 0.89.

Friendship prevalence. The 6 items developed by Nielsen et al. (2000) were used to measure friendship prevalence. Cronbach's alpha was 0.78.

Personality. The measure used to assess personality was the 10-item Personality Inventory (TIPI) of Gosling, Rentfrow, and Swann (2003) – a short version of the most commonly used measure for personality, the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrea, 1992). The TIPI identifies personality along the following dimensions: extraversion, conscientiousness, emotional stability, openness to experience, and agreeableness. The short version has been shown to have high criterion and content validity and to correlate highly with the original NEO-FFI (Gosling et al.). Cronbach's alphas were as follows: extraversion, 0.51; conscientiousness, 0.43; emotional stability, 0.54; openness to experiences, 0.34, and agreeableness 0.43.

Gender. Gender was coded as male = 1 and female =0.

Tenure was a categorical variable measuring the length of time in the current organization. It was measured in years (1 = less than one year, 2 = 2-3 years, 3 = 3-5 years, 4 = 10 years, 5 = more than 10 years).

Education was a measure of the education level achieved. It was a categorical variable with six categories ranging from 1= less than 12 years of schooling to 6 = MA, MS, LLB, or higher degree.

Friendship types. The scale used was the four-factor, 16-item scale described under Study 3. Cronbach's alphas were as follows: Sanity Check, 0.88; Safety/Trust, 0.90; Job Instrumentality, 0.85; and Missing Role, 0.90. Inter-correlations between the friendship types were moderate to low, as in the previous samples. The correlation between Sanity Check and Safety/Trust was rather high, 0.7. This was taken into consideration in the analyses.

Results

The convergent and discriminate validity correlations are reported in Table 8. As can be seen from the table, the relationships between the FTS subscales and the other measures follow my general predictions.

Scores on the subscales of the Social Provisions scale are correlated with the subscales of the FTS with *r*'s ranging from 0.15 to 0.56 ($p<.05$). Thus, in general, the subscales of the FTS appear to be moderately related to the subscales of the social provisions scale. However, given that the two scales measure different constructs, it is not surprising that the correlations are not very high. As expected, Safety/Trust is most highly correlated with attachment and guidance, and Missing Role is related chiefly to opportunity for nurturance. Sanity Check is most highly correlated with guidance and social integration, and Job Instrumentality is most highly correlated with sense of reliable alliance.

Support was also generally found for the expected relationships between the subscales of the FTS and those of the social support scale. Specifically, Safety/Trust was highly correlated with emotional support, and moderately correlated with affectionate support. It was also highly correlated with informational support, which is in line with the Safety/Trust type of friendship. People are likely to turn to a Safety/Trust friend for suggestions or advice about how to deal with a personal problem or area of concern. In line with expectations, Missing Role was most highly correlated with emotional and affectionate support. Sanity Check was most highly correlated with informational support, and Job Instrumentality with tangible and affectionate support. Finally, I expected that the different types of friendships would not differ with regard to their relationship with the positive social interaction type of support. This expectation was also upheld for the Safety/Trust, Missing Role, and Sanity Check friendship types, but not for Job Instrumentality, where the correlation with positive social interaction was low. This interesting finding is, nonetheless, in line with the idea that

an instrumental-based friendship revolves around the rewards or benefits obtained from the relationship; thus, a positive social interaction is not necessarily needed.

As expected, all the friendship types were positively correlated with the friendship prevalence scale, *r's* ranging from 0.30 to 0.50 ($p < .001$). Regarding personality, the findings confirm the contention that individuals with different personality traits are likely to differ with respect to the types of friendships that they form at work. From the correlations, we may infer that people who score high on the extraversion scale are more likely than highly introverted people to form friendships on the basis of the Sanity Check. This suggests that a need for validation of their thought processes may be characteristic of highly extraverted people. Another interesting finding is the significant negative correlation between conscientiousness and Job Instrumentality. This finding suggest that individuals who tend to be thorough, careful, and self-disciplined also tend not to develop friendships on the basis of expectations for special treatment or other instrumental benefits at work. Agreeableness was also negatively correlated with Job Instrumentality, suggesting that a similar distaste for using friends to gain advantage is also found among very warm, sympathetic, and considerate individuals. Agreeableness was also significantly correlated with Safety/Trust, in keeping with the notion that individuals who are kind and considerate are also likely to be trustworthy, and to seek out trustworthiness in others.

Evidence for discriminant validity can also be generally inferred from the correlations in Table 8. No relationship was found between the FTS and either education or tenure. Thus, the findings establish convergent and discriminate validity for all subscales of the FTS.

General Discussion

The purpose of this article was threefold: 1) to examine whether different types of friendships exist in organizations; 2) to develop a new typology of friendship based on

variation along a number of dimensions; and 3) to develop and validate a new instrument able to differentiate between different types of friendships. The results of this research demonstrate that different types of friendships indeed exist in organizations. Specifically, the findings suggest four key types: Sanity Check, Safety/Trust, Job Instrumentality, and Missing Role. At a macro-conceptual level, these results provide support for the proposed dimensional model, which suggests that friendships incorporate affective, cognitive, behavioral, and instrumental elements, but vary in terms of the importance of each one. For example, a Missing Role friendship is mainly affective in nature, in that feelings and emotions play a dominant role in the friends' interactions; but such friendships also presumably include cognitive, behavioral, and (potentially) instrumental aspects, in that the friends can be expected also to share information, spend time doing things together, and so on. Similarly, in a Sanity Check friendship the cognitive dimension is dominant, but it is likely that the friends also do things together and at times share their feelings.

It is important to stress that the four types of friendships identified in the current research are not intended to be seen as exhaustive. On the contrary, the typology advanced here allows for the list of friendship types to be expanded in two ways. First, as suggested in Table 1, at least 12 other types are theoretically possible. Second, each of the types identified here may represent only one possible way in which dimensional variation they embody can be expressed. For instance, the pattern Low, High, Low, Low (for the affective, cognitive, behavioral, and instrumental dimensions respectively) was expressed in the business school employees sample used in Study 1 in the manner here labeled Sanity Check, but such a pattern might well find different expression in a different sample. Identification of such additional types or subtypes awaits further empirical investigation.

Additionally, the typology developed in this article is intended to supplement and extend rather than supplant existing friendship typologies. In the introduction, I reviewed

three existing typologies that differentiate friendships by group, by context, and along an affective dimension. These typologies can be combined with the new typology developed in this article to further our understanding of friendships and their effects. For example, the casual/good/best friend typology, which focuses on the affective dimension of friendships, can be examined under the macro-category of "affective-based friendships." Such an approach would allow examination of interesting questions relating to what it means for a friendship to deepen or to grow in intimacy. In what ways do friendships that follow a Safety/Trust path (or a Missing Role path, or a Job Instrumentality path) change as a friendship deepens? Are some types of friendship only possible among very close friends? For instance, can there be a Missing Role friendship with very low intimacy (i.e., among casual friends), or do such friendships by nature jump to a deeper level almost immediately upon formation?

The models that distinguish friendships by groups or by context could likewise be combined with the new typology. With regard to the former, researchers could address whether and how different groups differ with respect to the four types of friendships. This area of inquiry might include both differences between groups with respect to a given friendship type (e.g., do the instrumental-based friendships formed by men differ from those formed by women?) and differences in type with respect to given populations (do newcomers to an organization differ from veteran employees with regard to the types of friendships they form?). With regard to context, a number of research questions suggest themselves. Are given types of friendships more or less prevalent in private versus public organizations? In organizations with casual versus formal cultures? In individualist versus collectivist societies?

Social media presents another fertile area of inquiry with respect to a typology of friendships. Does the ability to stay in constant touch via posts or updates on social media

platforms affect how friendships find expression in the physical world? Do friendships that form and exist largely (or even wholly) online differ in terms of their prevalent types or expressions from friendships maintained in the "old-fashioned" way?

Overall, the new typology and scale developed in this article allow for consideration of friendship along its various dimensions, expands the research possibilities inherent in previous typologies, and opens the door to the identification of additional friendship types. The comprehensive dimensional framework and new friendship typology developed in this article have several additional theoretical, methodological, and practical implications:

Theoretical Implications

As discussed, research on friendships in organizations has generally focused on the effects (positive or negative) of these ties on various outcomes. Yet scholars have not attempted to explain *how* and *why* friendships lead to specific outcomes, leaving the dynamics through which friendships affect outcomes a “black box.” The typology advanced here. The typology of friendships proposed here may aid in opening that box and can be used to elucidate the effects of different types of friendships on an array of individual and organizational outcomes, including job involvement, performance, organizational citizenship behavior, and turnover.

The new typology and scale can likewise be utilized to help explain internal organizational dynamics and processes such as cooperation, information sharing, and communication between and within departments. For example, Krackhardt and Stern (1988), in their study of informal networks and organizational crisis, found that employees who had friends in other organizational units were more likely to be cooperative during a crisis than employees who formed friendships only within their own unit. This interesting finding is worthy of further investigation. Was the important difference between the cooperative and less-cooperative employees simply the presence or absence of friendships outside the unit?

Or did the *types* of friendships formed within and outside the unit differ – and did those differences then affect the employees' willingness to cooperate? It seems possible, for instance, that friendships formed with employees in other units might be relatively more instrumental in nature. In cooperating during the crisis, those employees who had friends in other departments may thus have been simply returning a favor.

The FTS can also be applied to group research and the group/team level of analysis. In one study, Mehra et al. (2006) examined how the centrality of group leaders in internal and external friendship networks was associated with group performance and the leaders' reputations. Their findings suggest that the leaders' friendship ties provided access to resources that facilitated the group's performance and bolstered the leader's reputation. However, perhaps only some types of friendship ties have these effects. It may even be that the two outcomes – improved performance and enhanced reputation – derived from different friendship types, with the former benefiting most from, say, cognitive-based friendships (such as Sanity Check), which revolve around the transfer of information, and the latter from affective-based friendships, such as Safety/Trust.

Similarly, there are implications for the network level of analysis. Studying newcomers' socialization, Morrison (2002) found that for a newcomer, two types of networks are relevant for socialization: an informational network for acquiring various types of information and a friendship network for feeling integrated into the organization. By collecting data on the different types of friendships that may exist, we could further disentangle the dynamics and impact of the *networks* and especially the friendship network. For instance, it is possible that a an affective-based Work Safety/Trust friendship network is primarily useful for integration, whereas a cognitive-based Sanity Check type of a friendship network is useful for information exchange, even more so than the informational network.

Finally, friendship researchers have generally assumed that friendships are mutual and reciprocal. Nonetheless, researchers have found evidence for imbalances and unreciprocated friendships (Bowler & Brass, 2006; Krackhardt & Kilduff, 1999; Olk & Gibbons, 2010). A friendship is considered reciprocal if both individuals report that they share a friendship relationship; it is considered unreciprocated if only one reports that the other is a friend. Future research could investigate whether reciprocity is a function of the type of friendship. For example, it seems likely that affective-based friendships are reciprocated nearly all the time, while many instrumental-based friendships may be unreciprocated. Friendships are also imbalanced if the friends perceive their relationship in different ways, as when one friend perceives the friendship as based on sharing feelings (affective) and the other perceives it as based on sharing advice or information (cognitive). Such imbalances may affect work outcomes such as job involvement or satisfaction in ways that the FTS can help uncover.

Methodological Implications

As discussed, scholars studying friendship in organizations have generally not collected in-depth data on the basis of the relationship, the meaning of the friendship to the individuals involved, the maintenance of the relationship, or other micro-psychological factors. Scholars interested in collecting more in-depth data about friendships can now use the new typology and validated FTS as a starting point.

Likewise, there has been little research investigating the antecedents of friendship formation in organizations. As a result, we know very little about why and how workplace friendships form and develop. Nielsen et al. (2000) called for investigation of these antecedents: "It may be worthwhile for future studies to examine what factors facilitate workplace friendship in the first place…it may be variables that are more situational in nature such as the general culture of the organization, that lead to friendship. It may also be variables that are more individual – for example, how an employee treats other people that

may affect whether he or she experiences friendship in the workplace" (p. 642). The FTS can be adapted to answer Nielsen et al.'s call and investigate individuals' motivations for forming friendships at work.

Practical Implications

An understanding of the different types of friendships that exist in organizations may help managers promote potentially positive relationships and inhibit the formation of those that are potentially more negative. For example, some research has empirically linked friendships to enhanced team performance (Kratzer, Leenders, & van Engelen, 2005), while other studies have found evidence that friendships can cause dysfunction in groups and organizations (Yager, 2002). At this point, it remains an open question which kinds of friendships have positive effects, and which are likely to be detrimental. However, it seems plausible that it is trust-based friendships which have the most positive effects on team performance, and instrumental-based friendships which have the most negative effects. Empirical data confirming this supposition would give managers all the more reason to use the company's culture, rules, and guidelines to build a trust-rich environment – one that would encourage trust-based friendships and discourage friendships based on personal ambition at the expense of others.

Limitations

Like all empirical research, the studies reported in this article have some inherent limitations. Several of these relate to the research design of Study 1. First and most important, the small and very limited study sample – namely, 25 staff members of one business school – may well have affected the types and number of friendships reported. Future qualitative research should repeat Study 1 with a larger and more diverse sample. Second, participants were asked to reflect on their closest friendships at work. Future studies should ask respondents to reflect on other friendship categories in addition to their closest friendships. Third, only one of the

individuals in each friendship pair reflected on the friendship. Collecting data from both individuals in each dyad would have presented a fuller picture, and possibly led to the emergence of more friendship types. In future, friendships should be studied at the individual level of analysis by investigating both individuals' perceptions of the relationship. In this regard, future research should investigate whether imbalance in a friendship affects friendship types. Such research could also investigate the effects of imbalance in a friendship on organizational outcomes, as well as on the stability and development of such a relationship.

The second major limitation of this research involves the construction of the Friendship Types Scale, and particularly, the failure in Study 2 to validate the construct of WVLI Similarity, even despite efforts to drop some of the items. The literature provides a great deal of support for similarity and homophily as the basis of social relationships. Thus, it is possible that the lack of support found in the current study was due to a measurement problem. It is possible that because similarity can take many forms (demographic, attitudinal, life-related, work-related, and others), a single measure was not sufficient to capture the diverse dimensions of this construct. Moreover, it is likely that some similarity component is present in each friendship type, and so it is possible that the other friendship types captured the similarity dimension. This would also explain why some of the similarity items loaded on other types and not on a single factor.

Finally, it should be noted that the process of construct and scale validation is never complete. There is need for much empirical evidence and numerous studies over time to demonstrate whether or not a measure is valid. This study was a first attempt and a call to continue this validation process.

Conclusions

Not all friendships are created equal. In this article, I highlight the importance of collecting data on the various dimensions of friendships that allow differentiation of these important social relationships into different categories or types. Such an undertaking will broaden our understanding of these important informal relationships that affect our daily lives in the workplace and in other settings. Knowing more about types of friendships, the potentially positive ones and those we should be careful to avoid, could make workplaces more friendly, more productive, and simply more enjoyable. I have detailed several avenues where future research in the field of friendships could be followed. I encourage scholars to take on this challenge and begin creating a broad, empirical database from which a more detailed, profound, and extensive body of knowledge on friendship and their effects can be accumulated.

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Table 1
Friendship Types Defined by Variance along Four Dimensions

	Friendship Dimension			
	Affective	***Cognitive***	***Behavioral***	***Instrumental***
Friendship Type 1	Low	Low	Low	Low
Friendship Type 2	Low	Low	Low	High
*** Friendship Type 3**	Low	Low	High	Low
Friendship Type 4	Low	Low	High	High
*** Friendship Type 5**	Low	High	Low	Low
Friendship Type 6	Low	High	Low	High
Friendship Type 7	Low	High	High	Low
Friendship Type 8	Low	High	High	High
*** Friendship Type 9**	High	Low	Low	Low
Friendship Type 10	High	Low	Low	High
Friendship Type 11	High	Low	High	Low
Friendship Type 12	High	Low	High	High
*** Friendship Type 13**	High	High	Low	Low
Friendship Type 14	High	High	Low	High
Friendship Type 15	High	High	High	Low
Friendship Type 16	High	High	High	High

* Note: Four types of friendships were identified empirically in Study 1, representing friendship types 3, 5, 9, and 13. Based on the findings of Study 1, the identified exemplars are labeled in this study "Work-values/life-interests Similarity" (Type 3), "Sanity Check" (Type 5), "Missing Role" (Type 9), and " Safety/Trust" (Type 13).

Table 2
Descriptive Statistics for the Entire Sample and by Type of Friendship (Study 1)

			Friendship Type							
Variable	All		Safety/Trust		Missing Role		Sanity Check		WVLI Similarity	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
1. Age	37.52	10.77	37.2	12.5	38	10.23	44.8	11.32	32.14	8.51
2. Sex [a]	0.36	0.49	0.5	0.55	0.29	0.49	0.4	0.55	0.29	0.49
3. Tenure (years)	8.65	9.49	7.92	10.9	10	8.7	13.1	13.44	4.76	5.23
4.Time BF (years)	1.9	1.66	1.48	0.92	3.14	1.95	2.54	1.75	2	0.82
N	25		6		7		5		7	

Frequencies and Percentages of the Categorical Variable "Frequency of Interaction" by Type of Friendship

5. Frequency of interaction (categories)	Safety/Trust		Missing Role		Sanity Check		WVLI Similarity	
	n	**%**	***n***	**%**	***n***	**%**	***n***	**%**
1= rarely	0	0	0	0	0	0	0	0
2= once a month	1	16.7	0	0	1	20	0	0
3= once in two weeks	0	0	0	0	1	20	0	0
4= once a week	1	16.7	1	14.3	0	0	0	0
5= a few times a week	2	33.3	1	14.3	0	0	2	28.6
6= Every day	2	33.3	5	71.4	3	60	5	71.4
N	6		7		5		7	

Note. M= Mean, SD= Standard Deviation, *n*= number, % = percentage, Time BF= Time known other before friendship [a] 1=male, 0= female**.**

Table 3

Comparison of Friendship Types along Lower-Order Dimensions of Friendships

Dimensions	***Friendship Type***			
	Safety/Trust	**Missing Role**	**Sanity Check**	**WVLI Similarity**
1. Most Prominent Exchange	*Affective*	*Affective*	*Cognitive*	*Informational/Behavioral*
2. Emotional Intensity	*High*	*High*	*Low*	*Low*
3. Cognitive Exchange	*High*	*Low*	*High*	*Low*
4. Sociability/ Activities	*Low*	*Low*	*Low*	*High*
5. Support/Utility	*Emotional*	*Emotional*	*Cognitive/ Informational*	*Positive Social Interaction*
6. Meeting Place	*Mostly Work*	*Home & Work*	*Work*	*Mainly Work or Neutral*
7. Frequency of Interaction	*Moderate*	*High*	*Moderate*	*High*
8. Time known other before friendship	*Medium*	*Medium*	*Long*	*Short*
9. Relevance/ Influence of the Work Context	*High*	*Moderate to Low*	*High*	*Moderate to High*
10. Purposely Seeking/Chance	*Chance*	*Seeking*	*Seeking*	*Chance*
11. Trigger	*Pull*	*Pull*	*Push*	*Pull & Push*

Table 4
Description of Types of Friendships, Sample Responses, and Number of Responses per Category (Study 1)

Friendship Type	Description	Sample Responses	N
Safety/Trust	Participants in this group indicate that their friendship is based on feelings of security and trust. Participants feel they can share personal information without fearing the consequences. This is therefore an *affective*-based friendship.	*"He always listened to me and gave me advice, unconditional. I felt so easy to tell him things and didn't fear that I would hear about it back… I felt I could say anything and that's when I knew he was not just a colleague but a friend.* *"We can sort of joke back and forth with each other and feel comfortable in that way. We feel free to express our honest opinions and even be at odds occasionally, but we are free to express our opinions. She does my evaluations, but I still don't have to pretend. I can be me…"* "*I'm generally very introverted and I don't try to make an effort to make friends at work. I see work as work and I don't let it cross over into the social stuff. It's also a geographic thing, I live far away. But with him it was different. We worked together a lot and I saw that he was good and I trusted him. First, it was just work-related and confidential information, then I shared more personal things. It's the benefit that I can share also what I don't like without fearing the consequences. To a friend you could say anything without fearing. At least to me that's what I need to feel about a friend. I felt that about him and then it just grew from there.*"	6
Missing Role	Participants in this group indicate that the other person substitutes some missing role in their life or reminds them of someone close who was/is important to them (e.g., a parent, sibling, child, mentor, or even a younger version of themselves). This friendship is based on satisfying a deep *affective* need.	*"I saw that I could help him, I saw his potential and I knew how I could help him grow. It's like watching your son and lending him your tools as you go... He also came to me for advice and guidance and we just got closer"* *"..She's very motherly and I felt the chemistry immediately. She is nurturing and is so sweet that you can't help falling in love with her. It's so easy to open up and share ideas and life events with her. I go to her for advice, like a mother… "* *"When you see someone following your footsteps, you can't just let them fall. He is still very young and I see my own faults, something that I did. I know I can help him and so I'm like a mentor now, or I don't know, call it a father-figure… why shouldn't I help him if I can. I think he likes it and appreciates it too, although I keep telling him to tell me if I'm too pushy… I was drawn to him because of that and I cherish the friendship today"*	7

Table 4 (continued)

Sanity Check	This friendship is *cognitive* in nature and is based on satisfying a need for validation. Participants explain that the relationship moved to a friendship because a work situation or event required them to seek validation or confirmation of their thought processes.	*"I think it probably changed and we got closer when the new boss came. He was manic-depressive and she helped me understand that what I'm thinking is not crazy. She also helped me understand things better and put things into perspective. We were able to detect it early on while the others probably had no idea…. We seriously use each other for sanity checks, validation and give each other a heads-up…."* *"In our setting you can really lose it. Sometimes I am looking outside and I clearly see the sun, but the others keep trying to tell you that it's the moon. You have to have someone to test these things so that you can get back on track. It's funny, we joke about it a lot …that he is my compass and I'm his. Sometimes he walks in and says 'we lost north again' and we just laugh. The others don't have a clue. I think the friendship started because we had this need to know that we are ok and going on the right track."* *"My wife is my best friend and I can talk to her about everything, but she can never understand what goes on around here. There are things that I can only discuss with my work friend and he can give me the best advice because he lives it with me…."*	5
WVLI Similarity	Participants in this group indicate that the relationship moved to a friendship as they realized they shared work values and ethics and/or life interests. This made them want to spend more time together at work and outside it, and discuss other topics not directly related to work. The basis of this type of friendship is the *work and life similarity* the friends share.	*"We have the same social interests, we both enjoy food, eating, cooking. We like experiencing things together and we share the same sense of humor. She really makes me laugh sometimes…"* *"We got to know each other through a project that we worked on together and found we had a similar background and interests and so we could relate to each other. I like her very much and enjoy her company, we are compatible. I respect her strong work ethic. We share work values and ethics. We got to know each other through the experience of working together and we just enjoyed spending time together…."* *"We shared the work as a common interest. You see who the person is when you work with them, and when they are like you, it's easier to connect. I consider a close friend someone I've known for a while and who has a similar outlook on life. We had the work experience in common and she is also a good person to talk to. We go to events together and fun things. We go out to lunch or dinner and socialize mostly outside work. "*	7

Table 5:

Descriptive Statistics and Zero-order Correlations for Sample 2 (N=844)

Variable	***Mean***	***S.D.***	***1***	***2***	***3***	***4***	***5***
1. Safety/Trust	5.34	1.15	-				
2. Sanity Check	5.12	1.13	0.67***	-			
3. Missing Role	3.13	1.36	0.13***	0.21***	-		
4. Job Instrumentality	3.19	1.38	0.03	0.23***	0.54***	-	
5. Sex[a]	0.56	0.50	-0.16***	-0.12***	0.00	0.12***	
6. Marital Status[a]	0.53	0.50	-0.00	0.02	-0.03	-0.06	0.03

Notes. *** p < .001, ** p<.01, *p < .05 .[a] = *dichotomous variable.*

Table 6

The Final Items of the Friendship Types Scale (FTS)

Item #	
	SANITY CHECK
35.	He/she is a great person to bounce off ideas with (cog)
45.	I can learn from this person about work or non-work related issues (cog)
47.	He/she puts things in perspective for me when things go wrong at work (cog)
20.	He/she helps me think through issues/problems that come up at work (cog/behavior)
	SAFETY/TRUST
17.	I trust him/her (affect)
21.	I feel I can share anything with him/her and know that it would be safe (affect/behavior)
39.	I feel safe sharing private information with her/him (affect)
42.	I trust he/she would protect me and my interests (affect/behavior)
	JOB INSTRUMENTALITY
32.	He/she could help me get to where I want in my career (instrum)
37.	He/she has power to promote me (instrum/behavior)
55.	He/she is well connected in the organization (instrum)
57.	I knew the friendship would give me access to information that I wouldn't have if we had remained just colleagues (instrum)
	MISSING ROLE
26.	He/she resembles someone in my life that I am missing (affect)
28.	He/she reminds me of my parents/siblings or another closer family member (affect)
36.	He/she could fulfill a missing role in my life (affect)
41.	He/she reminds me of someone close (affect)

Notes: The type of higher-order dimension that the item represents is included in parenthesis [cog= cognitive dimension, affect = affective dimension, instrum= instrumental dimension, behavior= behavioral dimension]
*The items could be equally framed in past tense for reflection on a past friendship**.**

Table 7:

Descriptive Statistics and Zero-order Correlations for Sample 3 (N=679)

Variable	*Mean*	*S.D.*	*1*	*2*	*3*	*4*	*5*
1. Safety/Trust	5.45	1.08	-				
2. Sanity Check	5.03	1.12	0.66***	-			
3. Missing Role	3.21	1.46	0.19***	0.34***	-		
4. Job Instrumentality	3.01	1.45	0.02	0.31***	0.59***	-	
5. Sex[a]	0.32	0.46	-0.17***	-0.16***	-0.03	0.10**	
6. Marital Status[a]	0.55	0.50	-0.04	-0.02	-0.08	-0.12**	0.00

Notes. *** p < .001, ** p<.01, *p < .05 .[a] = *dichotomous variable.*

Table 8
Correlations of the FTS Scale and Measures of Un/Related Constructs

Measure (M/SD/ α)	Sanity Check (5.51/0.99/0.88)	Safety/Trust (5.67/1.03/0.90)	Instrumentality (3.48/1.75/0.85)	Missing Role (1.17/0.36/0.90)
SPS				
Attachment (21.04/4.45/0.78)	0.33**	0.56***	-0.17*	0.11
Social Integration (20.35/4.12/0.65)	0.35***	0.49***	-0.08	0.08
Reassurance Worth (21.44/4.05/0.71)	0.20*	0.31***	-0.19*	-0.02
Reliable Alliance (21.67/4.09/0.72)	0.31***	0.46***	-0.22*	-0.01
Guidance (21.32/4.24/0.73)	0.33***	0.50***	-0.18*	0.07
Oppor Nurturance (16.9/4.81/0.73)	0.15*	0.19*	0.07	0.20*
Social Support				
Informational (3.90/0.76/0.86)	0.64***	0.67***	0.20*	0.50***
Tangible (3.35/1.14/0.89)	0.23*	0.34***	0.22*	0.36***
Emotional (3.84/0.86/0.86)	***0.51	0.66***	0.10	0.47***
Social Interaction (3.79/0.85/0.82)	0.40***	0.50***	0.15*	0.42***
Affectionate (2.98/1.28/0.89)	0.27***	0.32***	0.28***	0.51***
Friendship Prev. (27.85/4.76/0.78)	0.50***	0.50***	0.30***	0.40***
Personality				
Extraversion (4.40/1.33/0.51)	0.16*	0.15	0.09	0.07
Agreeableness (5.35/1.12/0.43)	0.09	0.15*	-0.25**	-0.05
Consciousness (5.90/0.99/0.56)	0.13	0.21*	-0.20*	-0.06
Emotional Stable (5.28/1.17/0.54)	0.06	0.12	-0.12	-0.10
Openness (5.22/1.07/0.34)	0.22*	0.13	-0.11	-0.03
Tenure				
Less than a year (*n*=15)	-0.09	*-0.10*	0.02	-0.06
1-2 years (*n*=36)	0.04	-0.03	-0.12	-0.06
3-5 years (*n*=43)	0.04	*-0.02*	0.14	0.04
10 years (*n*=35)	-0.04	*-0.07*	0.03	0.05
10 + years (*n*=51)	0.02	0.17	-0.07	0.01
Education				
High-school or equiv. (*n*=26)	0.05	-0.05	-0.10	0.007
Some college no degree (*n*=35)	-0.00	0.07	-0.06	-0.02
Associates degree (*n*=24)	-0.07	-0.02	0.10	-0.03
BA degree (*n*=68)	0.05	-0.05	0.07	-0.02
MA, MS, LLB or higher (*n*=27)	-0.06	0.06	-0.02	0.06

Note. N= 180, M= Mean, SD= Standard Deviation, α = alpha coefficient, FTS= Friendship Types Scale, SPS = Social Provisions Scale, Friendship Prev= Friendship Prevalence Scale. * p < .05 , ** p<.001, *** p<.000;

[1] See page 11 for clarification on what I mean by "types" throughout the manuscript

[2] For simplicity, I assume reciprocal friendships, in which both individuals score equally on each dimension. Obviously, in reality, two friends may perceive aspects of their relationship in different ways. This possibility should be incorporated in future models.

[3] One topic of conversation that does not fit neatly into any category is gossip. Gossip may fill an affective need, as when talking (often pejoratively) about others reaffirms one's own self-concept while also helping strengthen the bond between the two talkers. Gossip may also fill a cognitive need by disseminating information about what is going on in a group or organization.

[4] Given that friendship by nature has an intrinsic orientation, as opposed to "agentic" relationships which are characterized by fairly explicit individual rights and "tit-for-tat" reciprocity, and are maintained for as long as their benefits to the individual exceed their costs (Rawlins, 1992, p. 168), some may argue that friendships which are high in the instrumental dimension are not real friendships. Indeed, it is worth asking at what point do we draw the line between using a friend to gain advantage, and pursuing or maintaining a "friendship" purely for this reason. For the present, I leave this question open.

[5] For the dimensional range under dimensions 2, 3, 4, 7, 8 and 9, participants included much more detailed data. For ease of comparison, the range was eventually translated into "High" and "Low" or "Long" "Medium" "Short".

[6] Although the results of Study 2 did not provide support for the WVLI Similarity factor, due to the strong theoretical basis for this factor in the literature, in Study 3 I also initially tested the model including WVLI Similarity. However, in this sample too, the similarity items contributed heavily to the misfit and significantly cross-loaded on additional factors. Consequently, similarity was not included in the rest of the analyses or the final scale.