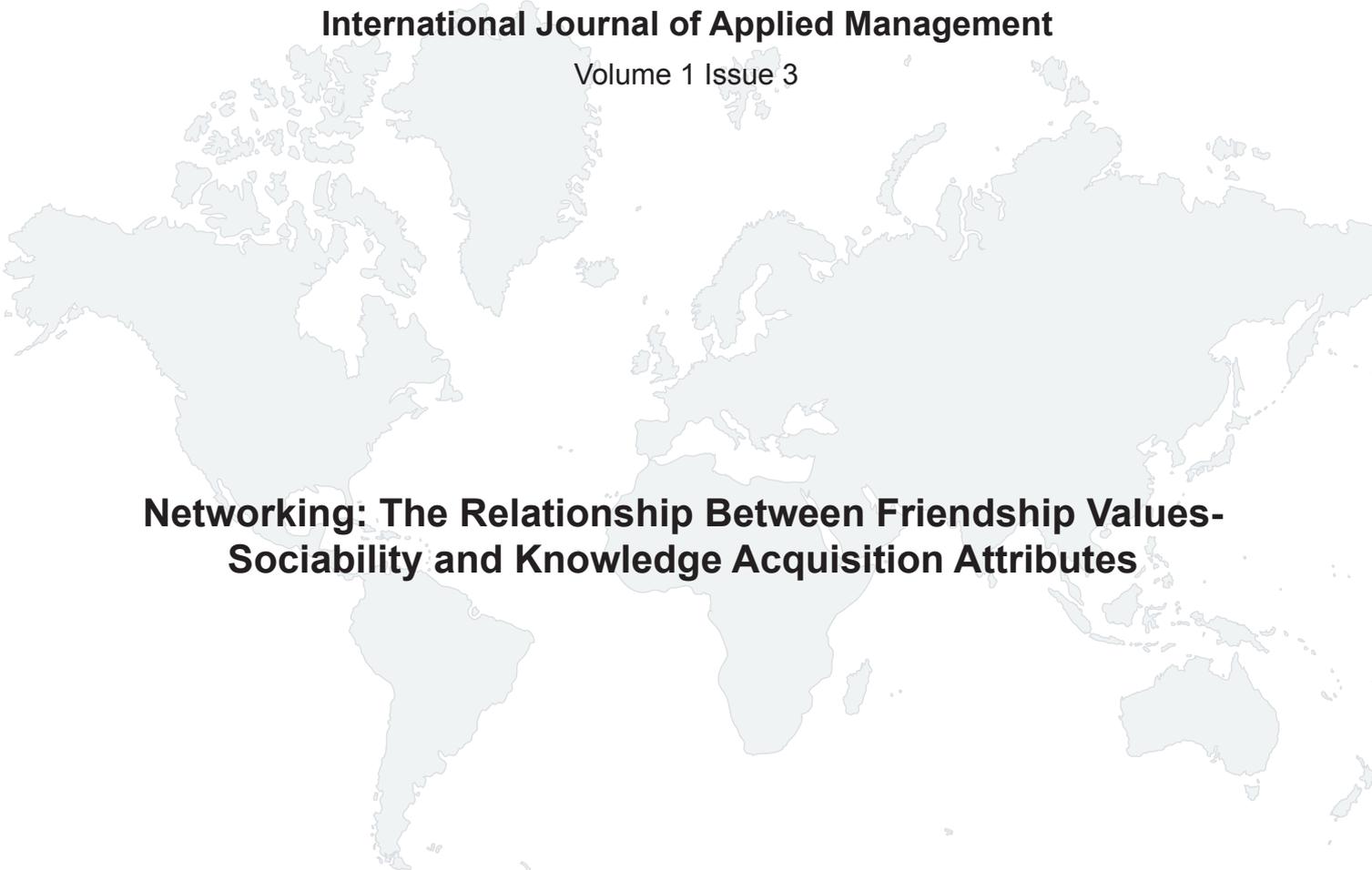


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### **Networking: The Relationship Between Friendship Values- Sociability and Knowledge Acquisition Attributes**

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## Abstract

Little is known about the effect of sociability and friendship values on the traits and skills of knowledge acquisition in self-managing teams. A survey of 89 individuals organised into 13 self-managing teams was conducted in a service organisation to investigate the relationship between the Hagoel's friendship dimensions and a number of knowledge acquisition attributes. Results indicate that most, but not all, of Hagoel's friendship values-sociability are positively related to variables of knowledge acquisition. Theoretical and practical applications of these findings are discussed.

**Keywords:** friendship values, knowledge acquisition, networking, self-managing teams, sociability

## Introduction

Knowledge management and intellectual capital has attracted tremendous attention in the last five years. Today, physical capital is of less relative importance for creating and sustaining competitive advantage than intellectual capital. Drucker makes the comment that the only competitive advantage of the developed countries is in the supply of knowledge workers; and that as "knowledge constantly makes itself obsolete", the developed nations need to work continually and systematically "on the productivity of knowledge and knowledge workers" (Drucker, 1997: 22). Yet, while the importance of many past knowledge management projects which focused solely on technology is widely acknowledged, there is far less clear understanding about how to manage knowledge for organisational survival (or success). Therefore, organisations are looking for answers about how to deliver organisational performance through new, knowledge-based concepts, theories and practices of management (Roos & Von Krogh, 1996), apart from technological solutions. In this time of change, the new approach to knowledge management deals with people and actions and their behaviour in aligning knowledge processes with organisational objectives (Politis, 2003; Viedma, 2003). It is about sharing the individual and collective brain power of people (knowledge), which cannot be harnessed in the absence of the social fabric of 'virtuous reality'.

In relation to 'virtuous reality' there is an enormous amount of literature that relates to *solidarity* and *sociability* (Goffee & Jones, 1998), both of which are underlying dimensions of *friendliness* (Robbins, Millett, Cacioppe & Waters-March, 2001). Organisations high on sociability view employees as family and friends and encourage shared values and vision, sincerity and goodwill (Rastogi, 2000). These organisations are referred in the literature as 'networking cultures' (Goffee & Jones, 1996). Given that knowledge acquisition and sharing are essential components for the competitive advantage of an organisation (Drucker, 1997; Politis, 2002); networking is the most important activity performed by employees (Luthans, Hodgetts & Rosenkrantz, 1988); and teamwork is growing in popularity (Manz & Sims, 2001); this research started by asking the following questions.

To what extent will friendliness-sociability affect employees' knowledge acquisition practices (or skills/traits)? What are the mechanisms that influence knowledge acquisition attributes in a work environment organised into self-managing teams? A means by which knowledge acquisition could be fostered and new knowledge encouraged needs to be defined. Therefore, this paper aims to look at the potential impact of employees' friendship values-sociability on knowledge acquisition attributes. In particular, it empirically investigates whether friendship values-sociability drive

and/or influence the traits and skills (i.e. knowledge acquisition attributes) of knowledge workers who are organised into self-managing teams. The study involves a questionnaire-based survey of knowledge workers organised in self-managing teams from a service organisation operating in Australia.

## Friendship Values - Sociability

Socialisation forms a vital component of Nonaka's (1998) knowledge creation model. In knowledge management, the SECI (i.e. socialisation, externalisation, combination and internalization) model of knowledge creation (Nonaka, 1998) suggests that knowledge creation starts with socialisation, which is the process of converting new tacit knowledge through shared experience in day-to-day social interaction. The ability to socialise (sociability) can be defined as a measure of sincere friendliness among members of a community (Goffee & Jones, 1998). In essence, it refers to a no-strings-attached way of relating to other members of your organisational community (Bogdewic, 2000). Sociability is enhanced when people communicate and trust each another, and when they share similar values, histories, and attitudes, all of which are embedded elements within a web or network of interrelationships (Stokman, 2001).

In organisations, a network of interrelationships surrounds employees (Tichy & Fombrun, 1979). Networks are distinguished by their relationship content, which indicate the kind of relationship linking proximate employees. For example, *instrumental network* links arise in the course of work-role performance, while *expressive network* relations arise mainly through friendship and social support (Lincoln & Miller, 1979; Fombrun, 1982). Instrumental ties provide an important resource of technical information necessary for employees to do their jobs efficiently. On the other hand, expressive networks or friendship ties tend to be stronger, more intimate, involve more frequent interactions (Krackhardt & Porter, 1986, Krackhardt, 1990), and tend to connect people who share similar personal characteristics such as political views, gender, race, age and religion (Marsden, 1988). In expressive networks, social relationships, such as cooperation, trust, intimacy, and empathy, often developed between employees.

For organisations to accomplish their goals, their employees must draw upon both instrumental resources, such as work-related advice and sponsorship, and emotional resources or expressive network relations, such as *friendship* (Ibarra, 1993). Bur friendship is known to be an underlying dimension of *sociability* (Goffee & Jones, 1998). Yet, sociability makes work enjoyable, fosters teamwork, promotes information sharing, and creates openness to new ideas (Bogdewic, 2000). It is a dimension, which measures the sincere friendliness among members of a community (Bogdewic, 2000; Robbins et al., 2001) and refers to the emotional and non-instrumental relations among them. It is the factor, which cultivates an atmosphere of informality where people feel comfortable to ask others for help (O'Dell, 1999), creating a trusting and knowledge-sharing culture (Rastogi, 2000).

The general message to date is that a high degree of sociability, viz. friendliness, creates a supportive and an enjoyable workplace (Bogdewic, 2000). It is also known that Hagoel (1980) has developed scales of friendship to measure the values people attached to friendship relations in general and to their friends in particular. Hagoel's (1980) friendship taxonomy consists of four dimensions of friendship: intensity, homophily, emotionality/instrumentality, and intimacy. According to Miller (1991:382):

- *Intensity* refers to the feeling of closeness and sharing secrets;

- *Homophily* refers to similarity of background, i.e. religion, ethic, racial background, political views, marital status, and age differences;
- *Emotionality/instrumentality* refers to emotional and affectional experience; and
- *Intimacy* refers to sharing of intimate personal information about oneself and others.

Although these dimensions have shown satisfactory 'reliability' (*intensity*,  $\alpha = 0.74$ ; *homophily*,  $\alpha = 0.85$ ; *emotionality/instrumentality*,  $\alpha = 0.68$ ); and *intimacy*,  $\alpha = 0.59$ ), and 'construct validity' (Miller, 1991:383), there is no reported research that has tested the relation of these particular measures with other areas of research, such as organisational outcomes and, more particularly, knowledge acquisition.

It is therefore, of particular interest to advance understanding of the relationship between friendship values – sociability and knowledge acquisition attributes, which is believed will assist organisational managers and knowledge-sharing researchers better understand and indeed shape developments in the merging self-managing work contexts.

## Knowledge Acquisition Attributes

Knowledge is usually classified as either explicit or tacit (Nonaka & Takeuchi, 1995; Nonaka, 1998). Explicit knowledge is described as formal, systematic knowledge that can be expressed or communicated without vagueness or ambiguity. It can be stored in books, manuals, and databases. Tacit knowledge, on the other hand, is considered as highly personal know-how that is derived from experience and beliefs and usually hard to articulate and communicate. It is about internal "meaning structures" in people's minds (Bourdreau & Couillard, 1999).

Although there is no one agreed definition of knowledge, knowledge often is defined in terms of its relationship with data and information. In theory, knowledge is described as deeper and richer information (Davenport & Prusak, 1998); information combined with experience, context, interpretation and reflection (Davenport, DeLong & Breers, 1998); and information that has been internalised by a person to the degree that she or he can make use of it (Delvin, 1999). In addition to data and information, knowledge is what people know, their social contact and interaction in performing assigned tasks, the way information flows and the enterprise's work culture (Pincas, 1998; Sallis & Jones, 2002).

With so many ways in describing the concept of knowledge, where should organisations begin? What are the mechanisms that influence knowledge acquisition? A review of the literature revealed that, in addition to the knowledge models which focus on technology, the background, skills, training and traits of knowledge workers (KWs) are often essential for successful knowledge acquisition and knowledge sharing (McGraw & Harbison-Briggs, 1989; Rolandi, 1986). In this regard, knowledge acquisition is defined as "acquiring information directly from domain experts" (Mykytyn, Mykytyn, & Raja, 1994: 98).

Mykytyn and colleagues (1994) revealed 26 behavioural skills and traits (attributes) that are essential for knowledge acquisition. These attributes are grouped into six factors: communication/problem understanding, personal traits, control, organisation, negotiation, liberal arts and nonverbal communication. *Communication/problem understanding* refers to interviewing; listening; sensitivity; open-minded; probing; conceptualising; rational thinking; and hindsight. *Personal traits* refer to empathy;

sense of humour; tolerance; and amiable. *Control* refers to politics; organisational knowledge; assertiveness; and salesmanship. *Organisation* refers to leadership; speaking; writing; management; and domain knowledge. *Negotiation* refers to diplomacy; patience; and co-operation. *Liberal arts knowledge* and *nonverbal communication* refers to being broadly educated, well-informed, having knowledge on subjects dealing with humanities, philosophy and literature and having a broad view of company's goals and operations. Mykytyn et al.'s study reported that these factors demonstrated good 'construct validity' with 23 of the 26 items loading successfully at 0.50 and above (Mykytyn et al., 1994: 99). Yet, their study showed that the factors have satisfactory 'reliability' (i.e. *communication/problem understanding*,  $\alpha = 0.86$ ; *personal traits*,  $\alpha = 0.77$ ; *control*,  $\alpha = 0.71$ ; *organisation*,  $\alpha = 0.72$ ; and *negotiation*,  $\alpha = 0.73$ ), with the exception of *liberal arts knowledge* and *nonverbal communication* which has shown low reliability ( $\alpha = 0.51$ ).

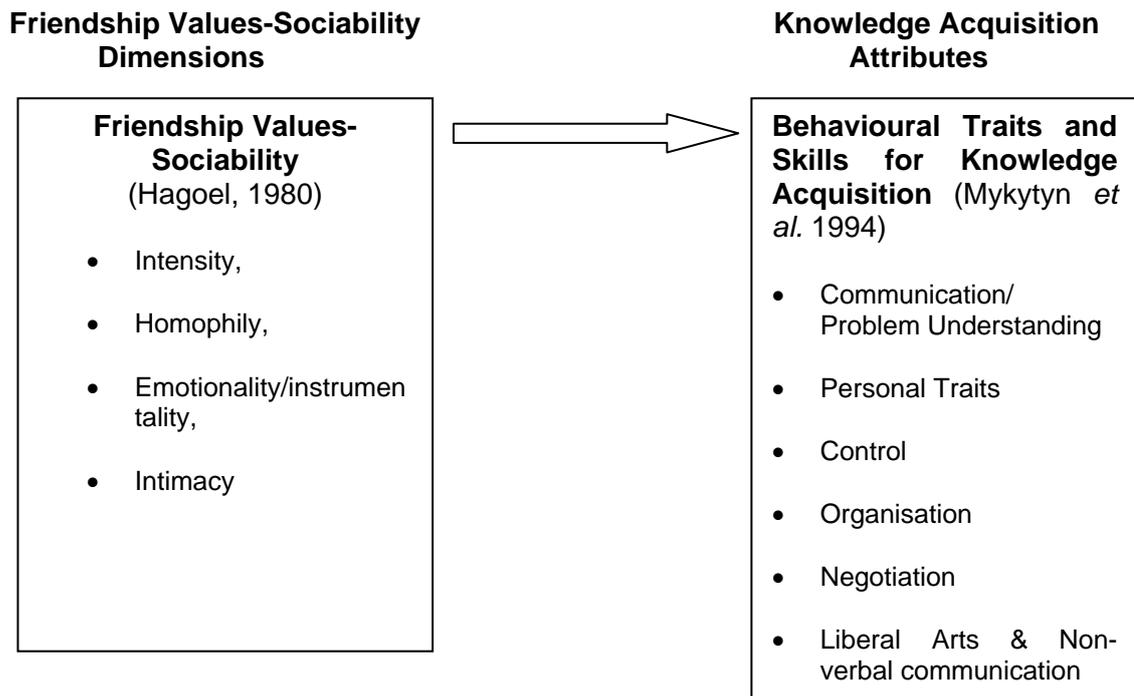
However, these behavioural skills and traits do not emerge in a vacuum. They evolve out of the context and the history of the organisation and their impact is conditioned by the subjective perceptions of knowledge workers whose experience is ruled by that history. This draws attention among other things (i.e. the techniques for knowledge acquisition, computer modelling, technological infrastructure, representation and use of knowledge (Schreiber et al., 1999)), to the (a) leadership styles; (b) virtuous reality; and (c) social interaction (or networking) among employees.

In relation to leadership, studies have shown that participative leadership styles correlated positively with followers' knowledge acquisition attributes and knowledge sharing (Politis, 2001). In relation to the virtuous reality, studies indicated that interpersonal trust enhances the development of employees' knowledge acquisition attributes (Politis, 2002) and creates a context for social interaction which shapes the creation and adoption of new knowledge (DeLong & Fahey, 2000). Moreover, there is evidence supporting that sociability makes work enjoyable, fosters teamwork, promotes information sharing, and creates openness to new ideas (O'Dell, 1999; Robbins et al., 2001). For example, in a recent study Handzic and Chaimungkalanont (2003) found that informal socialisation has a significant impact on organisational creativity and innovation. Yet, research shows that managers get two-thirds of their information from face-to-face meetings or via the telephone and only one-third from documents (Davenport, 1994). On the basis of both the socialisation and knowledge acquisition literature it is reasonable to hypothesise that the factors representing friendship values-sociability will be positively correlated with the knowledge acquisition attributes of self-managed knowledge workers (KWs), resulting in the following hypotheses:

- H1:* Intensity will be positively related to knowledge acquisition attributes of KWs.
- H2:* Homophily will be positively related to knowledge acquisition attributes of KWs.
- H3:* Emotionality/instrumentality will be positively related to knowledge acquisition attributes of KWs.
- H4:* Intimacy will be positively related to knowledge acquisition attributes of KWs.

The four hypotheses are summarised in the theoretical model depicted in Figure 1.

**Figure 1:** Summary of variables used in the paper



## Method

### Sample and procedures

*Sample:* The sample was selected from a medium size service organisation operating in Sydney, Australia. Evidence [1] suggested that the selected organisation is relatively flat with maximum four levels of hierarchy, organised into self-managing teams. Team members had only one level of supervision, namely, the team leader. All teams were similar, with an average size of 7 members, and team leaders had tenure of at least 8 months. They were what are commonly termed 'external' team leaders as they were not directly involved in the functions of their groups. All teams had been engaged in the process of teamwork for more than 4 years and team members had received training covering core team skills, administrative skills, technical skills and interpersonal skills.

Team members were closely linked to sales and service operations. They included sales officers, accountants, service technicians, service customer advisors and clerical staff. Respondents were engaged in the sales, services and repairs of automobiles, which require high levels of socialisation and knowledge sharing in dealing with customers and solving work-related problems. 89 employees (79.0 per cent individual response rate) organised into self-managing teams provided the data. Thirteen employees returned incomplete questionnaires which were excluded from the final sample. The final cohort contained data from 13 self-managing teams, for a team response rate of 81 percent. Participants consisted of 14.4% females and 85.4% males.

*Procedures:* Survey questionnaires were pre-tested, using small number of respondents (about half dozen; the pre-test participants did not participate in the final data collection). As a consequence of the pre-testing, relatively minor modifications were made in the written instructions and in several of the demographic items. The

revised survey was then administered to respondents in their natural work settings, during normal work hours. Written instructions, along with brief oral presentations, were given to assure the respondents anonymity protection and to explain (in broad terms) the purpose of the research. The participants were all given the opportunity to ask questions and were encouraged to answer the survey honestly; anonymity was guaranteed and no names or other identifying information was asked.

## Analytical procedures

Preliminary analysis using exploratory factor analysis (EFA) was carried out to explore the factorial composition of the questionnaire instruments and to obtain an estimate of factors that could be justifiably extracted. The analysis of moment structures (AMOS, version 4.0) was used as the main analysis for the factor analysis (measurement model) and for the regression analysis (path model). In past work using AMOS, researchers attempting to model relationships among a large number of latent variables have found it difficult to fit models because there should be at least five cases for each latent variable in the model (Bagozzi & Yi 1988). Therefore, steps were taken to reduce the number of measurements in the theoretical model being presented (Joreskog & Sorbom, 1989).

Following the recommendations of Sommer, Bae and Luthans (1995), we first developed the measurement model and then, with this held, a structural model was developed. Using confirmatory factor analysis (CFA) we first assessed the validity of the measurement models with the variables used in the paper. Given adequate validity of those measures, we reduced the number of indicators in the model by creating a composite scale for each latent variable (Politis 2001). Joreskog and Sorbom (1989) showed that it is possible to compute an estimated score ( $\xi^{\wedge}$ ) for each subject using factor score regression weights ( $\omega_i$ ), which are given in the output of structural equation modelling (SEM) statistics program. This is shown in equation (1).

$$\xi^{\wedge}_i = \sum \omega_i x_i \quad (1)$$

where:

$\xi^{\wedge}_i$  = is the estimated score;

$\omega$  = is the row vector of factor score regression weights; and

$x$  = is a column vector of the subject's observed indicator variables.

For example, the composite scale of 'intensity' was created from its six indicator variables in the measurement model. Then we determined the reliability alpha ( $\alpha$ ) for each composite latent variable. Given the reliability estimates, we built this information into the structural (path) model to examine the relationship between the composite latent variables. Munck (1979) showed that it is possible to fix both the regression coefficients ( $\lambda_i$ ), which reflect the regression of each composite variable on its latent variable, and the measurement error variances ( $\theta_{ii}$ ) associated with each composite variable. Munck showed that in the situation where the matrix to be analysed is a matrix of correlations among the composite variables, then the parameters of  $\lambda$  and  $\theta$  can be computed using equations (2) and (3) respectively. The variances of the composite variables in this case are equal to 1.

$$\lambda = \sqrt{\alpha} \quad (2)$$

$$\theta = 1 - \alpha \quad (3)$$

However, in the situation where the matrix to be analysed is a matrix of covariances amongst the composite variables, then Munck showed that the parameters of  $\lambda$  and  $\theta$  can be computed using equations (4) and (5) respectively.

$$\lambda = \sigma \sqrt{\alpha} \quad (4)$$

$$\theta = \sigma^2 (1 - \alpha) \quad (5)$$

where:

- $\lambda$  = regression coefficients;
- $\theta$  = measurement error variances;
- $\alpha$  = reliability coefficient for each composite latent variable;
- $\sigma$  = standard deviation of composite measure; and
- $\sigma^2$  = variance of composite measure.

In the causal modelling the covariance-based methods are exemplified by software packages such as LISREL, EQS, AMOS, etc. Because AMOS is been used in this paper, equations (4) and (5) were employed to compute regression coefficients ( $\lambda_i$ ) and measurement error variances ( $\theta_{ii}$ ). In turn these values have been used as fixed parameters in the structural model described below.

Each estimated coefficient can be tested for statistical significance for the predicted causal relationship. A mixture of fit-indices was employed to assess the overall fit of the measurement models. (Note: The same fit indices were also used to assess the fit of the path model.)

The ratio of chi-square to degrees of freedom ( $\chi^2/df$ ) has been computed, with ratios of less than 2.0 indicating a good fit. However, since absolute indices can be adversely effected by sample size (Loehlin 1992), four other relative indices (GFI, AGFI, CFI and TLI) were computed to provide a more robust evaluation of model fit (Tanaka 1987; Tucker & Lewis 1973). For GFI, AGFI, CFI and TLI, coefficients closer to unity indicate a good fit, with acceptable levels of fit being above 0.90 (Marsh, Balla & McDonald 1988). For RMR and RMSEA, evidence of good fit is considered to be values less than 0.05; values from 0.05 to 0.10 are indicative of moderate fit and values greater than 0.10 are taken to be evidence of poorly fitting model (Browne & Cudeck 1993).

## Measurement Models

### Measures of friendship relations - sociability

For this research, friendship values were assessed by using Hagoel's (1980) 32-item friendship value scales. The scale employs a 6-point Likert scale (1 = very strongly agree to 6 = very strongly disagree), and consists of four subscales: intensity, homophily, emotionality/instrumentality, and intimacy. The original CFA was conducted on four correlated factor model, containing the constructs of: intensity (6 items), homophily (12 items), emotionality/instrumentality (8 items), and intimacy (6 items). Based on the results of a CFA supporting three factors, these items were used to create three composite scales: *intensity* (6 items,  $\alpha = 0.71$ ); *homophily* (7 items,  $\alpha = 0.73$ ); and *emotionality/instrumentality* (8 items,  $\alpha = 0.70$ ). This 3-factor solution illustrates the best model fit because the value of  $\chi^2/df$  is below the recommended value of 2.0 ( $\chi^2/df = 1.96$ ), the value of GFI exceeded the recommended value of 0.9 (GFI = 0.928), and the values of AGFI, CFI and TLI fell marginally below the recommended value of 0.9 (AGFI = 0.886, CFI = 0.893 and TLI = 0.879). No

improvements were found in the fit indices when a hierarchy of competing models, from a simple null model of zero common factors through to from one-, two-, and four-factor solutions were tested. (Note: Eleven items were dropped due to cross or poor loading, these being of the order of, or less than 0.14.) The factor of intimacy was not supported. The 3-factor solution derived from CFA was also confirmed using a principal component analysis, with varimax rotation. Consequently, the factors of intensity, homophily, emotionality/instrumentality and were used in the structural equations analyses described below.

### Measures of knowledge acquisition attributes

Knowledge acquisition attributes were assessed by using the 26-item instrument developed by Mykytyn *et al.* (1994). It employs a 7-point Likert scale (1 = very unimportant to 7 = very important), and consists of six subscales: communication/problem understanding (8 items), personal traits (4 items), control (4 items), organization (5 items), negotiation (3 items), and liberal/nonverbal communication (2 items). The CFA results indicated that the “base” model proposed by Mykytyn *et al.* does not fit the data well since the values of GFI, AGFI, CFI and TLI fell below the recommended level of 0.90.

Thus, items were removed when AMOS showed non-significant paths or were loaded on another factor when modification indices suggested strong cross loading. Through this process a new 3-factor model has emerged which fits the data reasonably well ( $\chi^2 = 371.0$ ;  $df = 156$ ;  $\chi^2/df = 2.38$ ;  $p = 0.010$ ; GFI = 0.90; AGFI = 0.87; CFI = 0.91; TLI = 0.88; RMR = 0.090; and RMSEA = 0.089). The CFA results supported three composite factors: *communication/liberal arts* (10 skill/traits,  $\alpha = 0.79$ ); *personal traits/control* (5 skill/traits,  $\alpha = 0.72$ ); and *organisation* (4 skill/traits,  $\alpha = 0.70$ ). No improvements were found in the fit indices when a hierarchy of competing models, from a simple null model of zero common factors through to from one-, two-, four-, and five-factor solutions were tested. (Note: Seven skill/traits were dropped due to cross or poor loading, these being of the order of, or less than 0.12, not supporting the factor of organisation.) Consequently, the factors of communication/liberal arts, personal traits/control, and organisation were used in the structural equations analyses described below.

## Results

### Preliminary analyses

Correlation analysis was used to examine the patterns of relationship between friendship values/sociability and knowledge acquisition attributes. Table 1 report the means, standard deviations and the correlations among the variables included in the analyses.

**Table 1:** Means, standard deviations,  $\lambda$  and  $\theta$  estimates and correlations of friendship values and knowledge acquisition attributes

Latent variable	Mean <sup>a</sup>	SD( $\sigma$ )	$\lambda^c$	$\theta^d$	1	2	3	4	5	6
<b>Friendship values - sociability</b>										
1. Intensity	4.72	.82	.69	.195	<b>.71<sup>b</sup></b>					
2. Homophily	4.84	.84	.72	.191	.21	<b>.73</b>				
3. Emotionality/ instrumentality	4.39	.78	.65	.183	.28	.18	<b>.70</b>			
<b>Knowledge acquisition attributes</b>										
4. Communication /Liberal Arts	5.15	.73	.65	.112	-.13	.09	.16	<b>.79</b>		
5. Personal traits / Control	5.25	.76	.64	.162	-.22	.11	.23	.21	<b>.72</b>	
6. Organisation	5.42	.76	.64	.174	-.27	.21	.17	.18	.24	<b>.70</b>

<sup>a</sup> N = 89 individuals organised into 13 self-managing teams.

<sup>b</sup> Coefficient alphas ( $\alpha$ s) are located along the diagonal.

<sup>c</sup> Regression coefficient,  $\lambda = \sigma \sqrt{\alpha}$ ;  $\lambda$  has been rounded to two decimal places.

<sup>d</sup> Error variance,  $\theta = \sigma^2 (1 - \alpha)$ .

All correlations above 0.17 are statistical significant,  $p < 0.01$ ; all correlations between 0.15 and 0.17 are statistical significant,  $p < 0.05$ .

There are several important observations regarding Table 1. First, it can be noted that all sub-scales display acceptable reliabilities, these being of the order of, or above, the generally accepted value of 0.70 (Hair, Anderson, Tathan, & Black, 1995). Second, the correlations between the constructs used in this study are generally lower than their reliability estimate, indicating good discriminant validity for these factors (Hair et al., 1995). Third, it is interesting to note that similar patterns of correlations were obtained from the path modelling (see Figure 2).

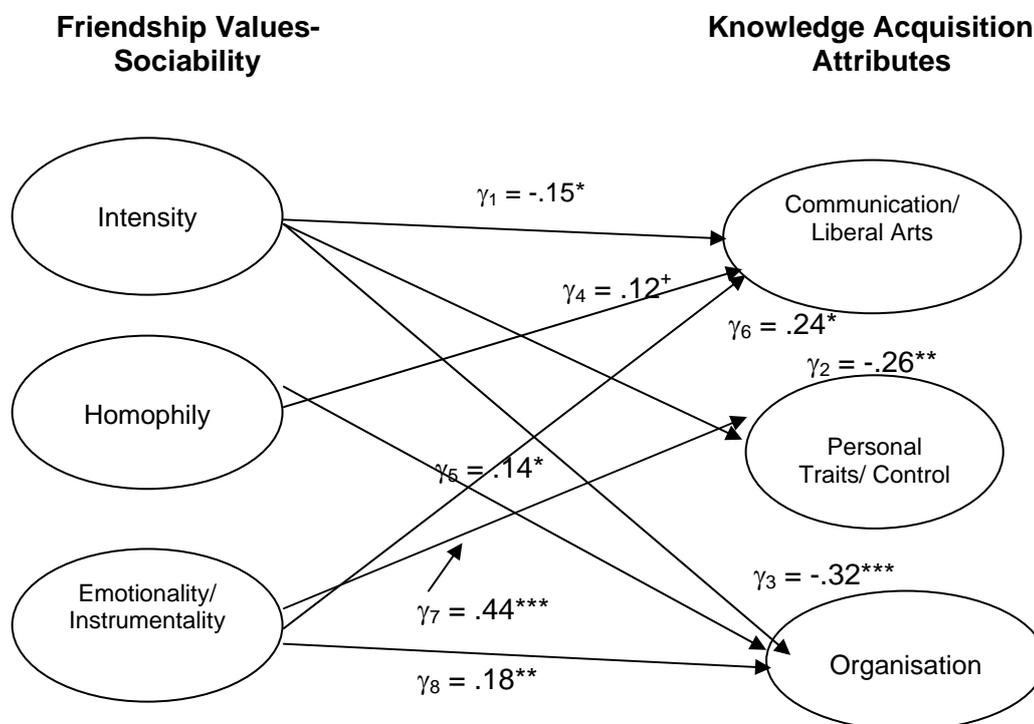
### Test of the theoretical model

Having outlined the formulae associated with computations of  $\lambda_i$  and  $\theta_i$ , the parameters in the path model were calculated. Table 1 report the means, standard deviations (SDs), reliability estimates,  $\lambda_i$  and  $\theta_i$ , estimates for the analysis. Once these parameters – regression coefficients ( $\lambda_i$ ) and the measurement error variances ( $\theta_{ii}$ ) – were

calculated, this information was fed into the path model to examine the relationships among the latent variables.

The model of Figure 2 contains three friendship values namely, intensity, homophily, and emotionality/instrumentality, and three attributes of knowledge acquisition (communication /liberal arts, personal traits/control, and organisation). The analysis reveals that the structural model of Figure 2 fits the data very well, with  $\chi^2 = 0.69$ ;  $df = 6$ ; ( $\chi^2/df = 0.12$ );  $p = 0.05$ ; GFI = 0.99; AGFI = 0.99; CFI = 0.99; TLI = 0.98; RMR = 0.010; and RMSEA = 0.009. Figure 2 displays results of the best fit structural equations model. Alternative models were examined with either paths added, reversed or removed, but all led to significantly worse model fit. Standardised path estimates ( $\gamma$ s) are provided to facilitate the discussion of the predictions derived from the theoretical model. (It should be noted that all standardised path coefficients and their significance levels given in the AMOS output are reported in Figure 2.)

**Figure 2:** Structural estimates of predicted model<sup>α</sup>



Note 1: <sup>α</sup> Standardised path coefficient; N = 89.

<sup>+</sup>  $p < 0.10$ ; <sup>\*</sup>  $p < 0.05$ ; <sup>\*\*</sup>  $p < 0.01$ ; <sup>\*\*\*</sup>  $p < 0.001$

All correlations of exogenous variables were statistical significant @ 0.001 level.

One of the four hypotheses is entirely supported by the data of this study. *H1* predicted that intensity will be positively related to knowledge acquisition attributes of KWs. Although the standardised paths from intimacy to knowledge acquisition attributes were strong and significant ( $p < 0.05$ ), they were on the wrong direction. Specifically, the relationship between *intimacy* and *communication/liberal arts* was negative and significant ( $\gamma_1 = -0.15$ ,  $p < 0.05$ ), followed by similar relationship between *intimacy* and *personal traits/control* ( $\gamma_2 = -0.26$ ,  $p < 0.01$ ), and between *intimacy* and *organisation* ( $\gamma_3 = -0.32$ ,  $p < 0.001$ ), not supporting our prediction.

As predicted by *H2*, there were significant positive relationships between homophily and two component dimensions of knowledge acquisition attributes of KWs.

Specifically, *homophily* is positively and significantly related to *communication/liberal arts* ( $\gamma_4 = 0.12$ ,  $p < 0.10$ ), and to *organisation* ( $\gamma_5 = 0.14$ ,  $p < 0.05$ ), marginally supporting *H2*. The expected influence, however, between *homophily* and *personal traits/control* was not supported.

*H3* predicted that emotionality/instrumentality will be positively related to knowledge acquisition attributes of KWs. Specifically, *emotionality/instrumentality* is strongly and positively related to *communication/liberal arts* ( $\gamma_6 = 0.24$ ,  $p < 0.05$ ), *personal traits/control* ( $\gamma_7 = 0.44$ ,  $p < 0.001$ ), and *organisation* ( $\gamma_8 = 0.18$ ,  $p < 0.01$ ), entirely supporting *H3*. Finally, *H4* was not tested because the component dimension of friendship, intimacy, was not confirmed by the CFA results. No other paths were significant.

## Discussion

The aim of this study was to extend the field of research investigating the relationship of sociability-knowledge acquisition variables by testing hypothesised links between friendship values-sociability and knowledge acquisitions attributes. The findings are not entirely consistent with the realm of sociability and knowledge management literature. Although the variable of intensity (i.e. feeling of closeness and sharing secrets) was negatively related to knowledge acquisition attributes, the findings demonstrated that the majority of friendship values-sociability have a significant impact on employees' knowledge acquisition attributes. These findings make several important contributions to knowledge management research and practice.

For research, they contribute an important and previously lacking empirical evidence confirming the value of friendship values-sociability in knowledge sharing/driven organisations. Management often finds theoretical, qualitative research insightful but is wary of basing decisions on it, fearing the fallibility of the logic and a scarcity of strong quantified data (Nancarrow, Moskvina & Shankar, 1996). The results of the present study represent a small step towards filling the huge void in empirical data in knowledge management (or acquisition). They clearly showed that the chaotic unstructured nature of friendship-sociability (more particularly, emotionality/instrumentality and homophily) is critical for encouraging skills and traits essential for knowledge management (acquisition) and knowledge sharing. Moreover, the study reported in this paper has provided a contribution to the theory of sociability. This study, which was carried out in Australia, did not generate a significantly different factor structure for the friendship value scales devised by Hagoel (1980), compared with those found in the research studies conducted in the U.S. by Hagoel. The similarity of results demonstrates that the constructs within the paradigm of socialisation theory do not vary significantly across the two different cultures.

For practice, the findings suggest that a set of inter-related strategies, enabling and encouraging continued friendship values-socialisation, need to be formulated. The key is for middle and lower level management to abandon traditional practices of being knowledge gatekeepers and antagonistic to knowledge-sharing and strive to promote knowledge-sharing culture, in which communication, negotiation, and sharing knowledge is encouraged, or even demanded. It is essential for organisations and their management to provide the best environment for encouraging and fostering friendship-socialisation, and by extension, advance knowledge acquisition and knowledge sharing. Only then, will free-flowing socialisation emerge and employees will turn to friends and colleagues for answers to their problem rather to sources of information (Cross & Baird, 2000). Only then, will knowledge workers motivational practices

change, and improve motivation, increase reflection and widen access through flexibility (Hughes 2001), thereby enhancing knowledge acquisition. Therefore, organisations should not only consider technical educational background, especially applied science, as the premier requirement of knowledge acquisition. What is more important is to identify those networks with individuals who possess high levels of sociability, viz. friendship values, in order to enhance the non-technical skills and traits of KWs, including the ability to conceptualise, interview, listen properly and probe knowledge-sharing.

## Limitations and future research

The present study shares some limitations with other similar studies. This research limited its focus to a key set of friendship values-sociability and knowledge acquisition attributes. Although the friendship values used in this study were considered important in capturing the aspects of sociability (Robbins, 2001), other factors are seen as playing an important role in knowledge culture. These are: solidarity (Goffee & Jones, 1998), leadership (Davenport et al., 1998; Politis, 2001), management support and encouragement (Davenport & Prusak, 1998), as well as freedom and availability of time for creativity (Nonaka & Konno, 1998). Future research is required in order to determine the exact nature of this knowledge culture and to formulate instruments that will reliably measure it.

Second, because of the cross-sectional design of the research, we cannot assess true causality, but rather associations between the variables of interest. Although from the analytical perspective structural equations modelling have a number of advantages in testing statistical causal relationships, actual causality cannot be tested directly. So, ideally future research must test the causality using experimental or longitudinal data for more definite results. Finally, a larger sample size would have allowed simultaneous estimation of measurement and structural models instead of assessing the measurement models first and then developing the structural model. Future research should estimate models that replicate these results using a larger sample size.

### Note

A 1997 case study: "The introduction of flat organisational structure of the manufacturing company selected for this study".

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