

APPENDIX C:
**DEVELOPMENT OF THE VITAL
FRIENDS ASSESSMENT:
A TECHNICAL REPORT**

Prepared by

James K. Harter, Ph.D.

Timothy D. Hodges, MS

Jason A. Carr, Ph.D.

THE GALLUP ORGANIZATION
1001 Gallup Drive
Omaha, NE 68102

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INTRODUCTION

The world is full of dyads — numerous individual, one-on-one relationships that shape our interactions and feelings each day. Yet not enough research has been done to understand how to categorize or summarize the meaning of the regular interactions in our lives. Many of the most important dyads in our lives are our friendships. They take on many dimensions. In the series of studies described in this report, we attempted to apply measurement to the dimensionality of friendships.

The Gallup Organization has accumulated studies on the role of friendships in the workplace — and the world — for decades. These studies have included both qualitative and quantitative methods. Qualitative methods include thousands of interviews and focus groups with productive individuals and teams. These interviews enable researchers to listen to successful individuals describe why they are successful. Such methods have been particularly useful in developing theories and designing questions.

Quantitative methods include asking questions and accumulating and analyzing numerical data to draw inferences from responses to questions. Decades of such research were available as a starting point in developing theories and writing items that would potentially tap into the dimensionality of friendships. Gallup meta-analyses continue to reveal a meaningful relationship between friendships at work and numerous

performance outcomes (Harter, Schmidt, & Killham, 2003), including customer loyalty/engagement, safety, and profitability. The goal of this project was to take the understanding of friendships to another level by studying the dimensionality of work and non-work friendships.

PHASE I

We conducted our research in several iterations, starting in 2004 and finishing in 2005. In early 2004, we began thinking about the dimensions of friendships by conducting qualitative interviews and writing statements that described the friendships we were studying. We wrote hundreds of descriptive statements about work and non-work friendships, knowing we would not be able to efficiently administer all of them to any one sample of respondents. Our team of item writers met several times, reviewed the statements, rewrote them, and deleted those that were either redundant or not understandable to a wide cross-section of people. Then in June 2004, we began our quantitative analysis with 144 statements that described the variety of friendships we had observed. The 144 items conceptually fit into 10 dimensions ranging from “guidance” to “fun” to “closeness.” The names of the dimensions (or friendship “roles”) have evolved over time, indicative of our item revisions and interactions with users of the assessment.

PHASE II

We began our quantitative analysis at call centers in Houston, Texas, and Irvine, California. We purposefully picked the most diverse call centers we could find, where employees ranged greatly in race, gender, and age. We asked 159 respondents to identify their closest friend at work, their closest friend away from work, and an acquaintance. Then we asked them to complete a 144-item web-based survey on each of the three people they had identified. Surveys were conducted from June 2-15, 2004. A 5-point agreement scale accompanied each statement, with 5="strongly agree"...1="strongly disagree," and a sixth "don't know/does not apply" option.

Example:	Strongly Disagree			Strongly Agree	
_____ is very open to my ideas.	1	2	3	4	5

In addition to the 144 Vital Friends items, we began the survey by measuring each respondent's subjective well-being (SWB, on a 5-item scale: Diener, 1984) and his or her engagement at work (Q¹² scale: Harter, Schmidt, & Killham, 2003). SWB items included: "In most ways, my life is close to ideal," "The conditions of my life are excellent," "I am satisfied with my life," "So far, I have gotten the important things I want in my life," and "If I could live my life over, I would change almost nothing." Engagement at work has been studied extensively and is substantially related to a variety

of performance outcomes, including business unit profitability, productivity, employee retention, customer engagement, and safety. Gallup's Q¹² includes items measuring the extent to which employees are involved in and enthusiastic about their work. The Q¹² has been completed by more than eight million employees worldwide. Below is a listing of the Q¹² items:

Gallup Q¹² Items	
<i>On a scale of 1 to 5, where 5 is strongly agree, and 1 is strongly disagree, please indicate your level of agreement with each of the following items.</i>	
Q01.	I know what is expected of me at work.
Q02.	I have the materials and equipment I need to do my work right.
Q03.	At work, I have the opportunity to do what I do best every day.
Q04.	In the last seven days, I have received recognition or praise for doing good work.
Q05.	My supervisor, or someone at work, seems to care about me as a person.
Q06.	There is someone at work who encourages my development.
Q07.	At work, my opinions seem to count.
Q08.	The mission or purpose of my company makes me feel my job is important.
Q09.	My associates or fellow employees are committed to doing quality work.
Q10.	I have a best friend at work.
Q11.	In the last six months, someone at work has talked to me about my progress.
Q12.	This last year, I have had opportunities at work to learn and grow.

Once responses to the survey were completed for the work friend, non-work friend, and acquaintance, we tabulated the data and studied the relationship between each item and both SWB and engagement at work. We also studied differences between the work friend, the non-work friend, and the acquaintance. We deleted items that did not meet both of the following criteria:

- significant correlation to either workplace engagement or SWB
- significant difference between closest friend (both work friend and non-work friend) and acquaintance

PHASE III

When Phase II was finished, we had retained 101 items. To expand the types of employees studied, we administered the 101 items (plus SWB and workplace engagement) to 152 English-speaking professional services firm employees worldwide from October 18-November 8, 2004.

We again asked each respondent to identify his or her closest friend at work and his or her closest friend away from work, and to complete the assessment on each. Differences between closest friends and acquaintances were extremely large for the items retained following Phase II; therefore, we did not collect the acquaintance data in Phase III.

At the conclusion of Phase III, we retained items that significantly correlated with their hypothesized dimensions (role) and

that significantly correlated with either workplace engagement or SWB.

PHASE IV

After Phase III ended, we had retained 66 items. To again expand the types of employees studied and the size of our instrument development sample, we administered the 66-item instrument to 1,588 randomly selected U.S. adults, 18 years of age or older, from Gallup's panel of 17,855 households. The sample was 55% female, 45% male; 83% Caucasian, 17% minority; and the average age was 44.21 years.

Once again, items were studied in relationship to the dimension (role) they were intended to measure and in relation to workplace engagement and SWB. Additionally, we conducted the above analyses for subgroups of race, gender, and age so that items could be tested as to criterion relevancy for a variety of demographic groups. We retained 65 of the 66 items. Table 1 presents the number of items per Vital Friends role and the average item correlation to its own role (its own role score minus the item being studied) for work and non-work friends. Table 1 also includes the Cronbach's Alpha reliabilities, which represent the coefficient of equivalence. Reliabilities of .70 or higher are generally considered high. Results of the analyses indicate the reliabilities for individual Vital Friends roles are quite high — generally well above .80, and exceeding .90 in some cases.

Table 1: Statistics For Each Vital Friends Role

		Average Item to Theme*		Cronbach's Alpha Reliability	
Vital Friends Role	# of Items	Work Friend	Non-Work Friend	Work Friend	Non-Work Friend
Builder	9	.71	.71	.92	.92
Champion	7	.66	.58	.87	.81
Collaborator	10	.61	.58	.88	.85
Companion	10	.68	.63	.91	.88
Connector	5	.63	.57	.83	.79
Energizer	8	.65	.63	.88	.87
Mind Opener	7	.61	.60	.85	.84
Navigator	9	.68	.68	.90	.90

*Correlation corrected for part-whole overlap

TEST-RETEST RELIABILITY

In the summer of 2005, a preliminary test-retest study was conducted in which 91 participants were asked to rate a friend using the web-based Vital Friends Assessment. The participants were asked to rate the same friend again about two weeks later. The period between test and retest administrations for each of the participants ranged from 15 to 42 days. Participants were able to view the role reports generated after each administration.

The results of the test-retest study were analyzed in several ways. First, the test-retest reliabilities of the individual Vital Friends roles were examined (see Table 2). The test-retest reliabilities were generally high; the reliabilities ranged from 0.78 to 0.85. The mean of the test-retest reliabilities was 0.82.

Next, for each of the participants, the ranking of the entire set of roles at test was correlated with the ranking of the entire set of roles at retest. The median Spearman's rho value was 0.62. The average Spearman's rho value was 0.54.

Vital Friends Role	Test-Retest Reliability
Builder	0.83
Champion	0.81
Collaborator	0.84
Companion	0.83
Connector	0.78
Energizer	0.82
Mind Opener	0.79
Navigator	0.85

More details on test-retest reliability are provided in Carr (2006).

FACTOR ANALYSES

In addition to studying the intercorrelation among the items in the Vital Friends Assessment and correlating each item to its respective theme, factor analyses were used during each iteration of quantitative instrument development (Phases II through IV) as a guide to reduce the redundancy of items in each role and to maximize the independence of the measured constructs. Principal Components factor analysis with both Varimax and Direct Oblimin rotation was used. Results of both the Varimax and Direct Oblimin rotations were similar. Factor analysis conducted

on the 65-item instrument indicated seven interpretable factors, all with eigenvalues greater than 1 (for work and non-work friends). The factor analysis revealed a large first factor. The items included in the first factor (which include items psychologically indicative of “mentoring” friendships) were factor analyzed separately, revealing two distinguishable constructs that we call “Builder” and “Navigator.” Separately, these two friendship roles distinguish between those who provide a “motivational” role versus a “guiding” role. Two example items that distinguish between these two factors are: “_____ pushes me to achieve more” and “I would not make an important decision without _____.” Therefore, we retained an eight-factor solution (the seven-factor solution, with the first factor split into two roles), knowing there would be slightly more overlap between “Builder” and “Navigator” than among the remaining six roles.

CRITERION RELATEDNESS

Table 3 shows the correlation of each Vital Friends role to engagement at work and SWB for both the work friend and non-work friend who were being rated. Correlations in each case are positive and significant. Vital Friends roles correlated most positively to engagement at work (for the work friends who were rated), and to SWB (for the non-work friends who were rated). This is consistent with theory, in that we would expect the work friendships to correspond with levels of employee engagement.

And the non-work friendships rated more positively should be associated with higher levels of life satisfaction for the respondents. The correlation of Vital Friends role to engagement varies from .22 to .28. The correlation of Vital Friends role to SWB varies from .12 to .21. It is important to assess the practical meaning of these relationships.

Table 3: Correlation of Vital Friends Roles to Workplace Engagement and Subjective Well-Being				
Correlation* to:				
Vital Friends Role	Work Friend		Non-Work Friend	
	Engagement**	SWB***	Engagement**	SWB***
Builder	.27	.10	.14	.18
Champion	.22	.09	.13	.17
Collaborator	.28	.15	.13	.20
Companion	.25	.11	.08	.17
Connector	.24	.08	.14	.12
Energizer	.24	.09	.14	.21
Mind Opener	.28	.13	.16	.21
Navigator	.28	.12	.10	.19
* (n=1,588) correlations greater than .06 are significant ($p < .05$); correlations are corrected for dependent variable measurement error ** Workplace engagement measured by mean of Gallup Q ¹² (Buckingham & Coffman, 1999; Harter, Schmidt, & Killham, 2003) *** Subjective Well-Being (SWB) measured by mean of five-item SWB scale (Diener, 1984)				

Applying Gallup's proprietary formula to the Q¹² items in this sample, 31% are "engaged" in their work, 54% are "not engaged," and 15% are "actively disengaged." Those who rated their

closest work friend in the top quartile on the “Collaborator” role had much higher overall engagement at work: 54% “engaged,” 39% “not engaged,” and 7% “actively disengaged.” People with “Collaborators” at work have a 74% greater chance of being engaged at work. This is the practical effect of a .28 correlation.

Similar relationships are seen in the additional roles. Each role contributes positively to engagement at work.

For non-work friends, the correlation of the “Energizer” role and SWB (life satisfaction) is .21. For the overall sample, 40% of respondents had SWB of 4.00 or higher (on a 5-point scale); 52% of those who rated their closest non-work friend in the top quartile on “Energizer” had high SWB (4.00 or higher). This compares to 27% of those who rated their closest non-work friend in the bottom quartile on this role. Respondents are nearly twice as likely to feel good about their lives if they have a friend to whom they give high ratings on this one role. However, it is not just this one role that relates to SWB. Each role is positively related to SWB. Therefore, each role can contribute to satisfaction with life.

SUMMARY AND APPLICATION

The Vital Friends Assessment is a web-based instrument designed to help individuals discover the roles friends play in their lives. Based on decades of Gallup research on relationships, this instrument is designed to focus on what friends contribute to relationships, not what is missing from the relationships. It

is an instrument designed around productive relationships — those consistent with high life satisfaction and high engagement at work.

Participants are asked to select a friendship they would like to evaluate with the assessment. Then the Vital Friends Assessment presents 65 statements that the respondent completes about his or her friend. Once completed, a report is produced that lists the top three Vital Roles the respondent's friend plays in his or her life. Statistically, the themes are ranked according to the extent of respondent endorsement. The Vital Roles offer a measurement-based language to use in describing a friendship that can enable the participant to build on what is right about the relationship.

The Vital Friends Assessment has been rated at the fourth-grade reading level, based on the Flesch-Kincaid Grade Level Formula.

REFERENCES

- Carr, J.A. (2006). *A test-retest evaluation of the Vital Friends Assessment*. Omaha, NE: The Gallup Organization.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Harter, J.K., Schmidt, F.L., & Killham, E.A. (2003, July). *Employee engagement, satisfaction, and business-unit-level outcomes: A meta-analysis*. Omaha, NE: The Gallup Organization.

APPENDIX D:
**GALLUP RESEARCH ON
FRIENDSHIPS**

Unless otherwise noted, all research conducted by The Gallup Organization mentioned in this book stems from two primary sources. The first source is the well-known Gallup Poll, the vehicle through which our organization has been gauging world opinions for more than seven decades. The second source is Gallup's rapidly expanding employee engagement database, through which we have asked millions of people how they feel about their workplaces. It is important to note that these two sources represent very different audiences. Gallup conducted the employee engagement surveys for client organizations that contracted with Gallup to measure opinions on a regular basis. In most cases, these studies include a census of employees in a given business

unit or organization. In contrast, the data collected via The Gallup Poll is based on a random sampling of anyone 18 years or older within the given population. What follows is a more detailed description of these two major sources of information on friendships.

THE GALLUP POLL

In March 2005, we conducted a poll in which we asked several questions about friendships, life satisfaction, health, and workplace opinions. We surveyed 1,009 people in this specific study. We then compared the data between questions to investigate the linkages between two or more variables. For example, we asked the question: “Overall, how satisfied are you with your life?” early in the survey. And later, we asked people to indicate their level of agreement with the following statement: “My workgroup feels like a family.” Respondents rated both items on a 1-5 Likert-type scale. After collecting all the data, we looked for significant linkages between items.

For a detailed explanation of how Gallup Polls are conducted, you can visit the FAQ section at <http://www.galluppoll.com>.

GALLUP’S EMPLOYEE ENGAGEMENT (Q¹²) DATABASE

In the late 20th century, Gallup scientists realized that we were asking far too many questions when conducting employee

surveys. Furthermore, asking different questions in every company and industry was not very helpful for the sake of comparison. As a result, we combed our databases and looked for the most powerful predictors of employee engagement. This resulted in Gallup's Q¹² metric, which has since been asked of millions of employees worldwide. Of particular interest to our study of friendships was the data accumulated on question 10: "I have a best friend at work."

DATABASE DESCRIPTION

We analyzed data from 2002, 2003, and 2004, which include:

- 4.51 million respondents
- 423,000 workgroups
- 332 clients
- 37 languages
- 112 countries

These data represent 12 major industry types:

- Accommodation and Food Services
- Educational Services
- Finance and Insurance
- Healthcare and Social Assistance

- Information
- Manufacturing
- Professional, Scientific, and Technical Services
- Public Administration
- Retail Trade
- Services
- Services Without Healthcare
- Utilities

THE META-ANALYSIS

A meta-analysis is a statistical integration of data accumulated across many different studies. As such, it provides uniquely powerful information because it controls for measurement and sampling errors and other idiosyncrasies that distort the results of individual studies. A meta-analysis eliminates biases and provides an estimate of true validity or true relationship between two or more variables. Statistics typically calculated during meta-analyses also allow the researcher to explore the presence, or lack thereof, of moderators of relationships.

More than 1,000 meta-analyses have been conducted in the psychological, educational, behavioral, medical, and personnel

selection fields. The research literature in the behavioral and social sciences includes a multitude of individual studies with apparently conflicting conclusions. Meta-analysis, however, allows the researcher to estimate the mean relationship between variables and make corrections for artifactual sources of variation in findings across studies. It provides a method by which researchers can ascertain whether validities and relationships generalize across various situations (e.g., across firms or geographical locations).

FINDINGS SPECIFIC TO THE “BEST FRIEND” QUESTION

We found that people with best friends at work have:

- better safety records
- higher customer loyalty scores
- more profitable teams

When people have a best friend at work, they simply achieve more. As we dug deeper into this research, we discovered that employees who report having a best friend at work, when compared to those without a best friend at work, were also:

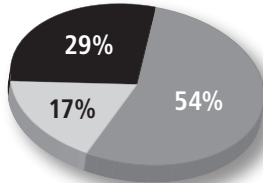
- 43% more likely to report having received recognition and praise in the previous seven days

- 37% more likely to report that someone at work encourages their development
- 27% more likely to feel that their job aligns with the company's mission
- 27% more likely to feel that their opinions count at work
- 21% more likely to report that at work, they have the opportunity to do what they do best every day

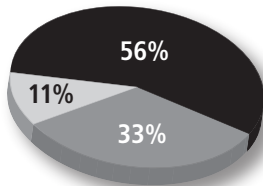
Unfortunately, only 3 in 10 of the millions of people in our database strongly agree that they have a best friend at work, while the remaining 7 in 10 do not. As a result, those who do not strongly agree that they have a best friend at work are drastically less engaged in their jobs: only 8% of these people are engaged. (“Engaged” employees are the people who show up mentally and physically every day and have the highest productivity.)

The value of best friends at work

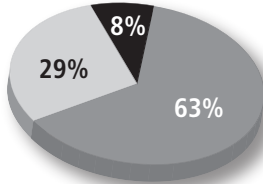
Among all employees:






Among employees with a best friend at work:



Among employees without a best friend at work:



-  **Engaged:**
Eager to work with passion, creativity
-  **Not engaged:**
Doing minimum work necessary
-  **Actively disengaged:**
Undedicated, actively damage productivity

If you do not strongly agree that you have a best friend at work, the chances of being engaged in your job are an abysmal 1 in 12. In sharp contrast, among those who strongly agree that they have a best friend at work, 56% are engaged, and only 11% are actively disengaged. Overall, employees who strongly agree that they have a best friend at work are seven times as likely to be engaged in their work each day.

SUMMARY

This “best friend” item has been, by far, the most controversial part of our standardized employee survey. Every time we prepare to conduct this survey in a new organization or country, people object to this one item and insist that it will not work. However, millions of interviews later, meta-analytic research across a diverse group of companies and countries indicates that this item consistently predicts critical business outcomes.

REFERENCES

Harter, J.K., Schmidt, F.L. & Killham, E.A. (2003, July). *Employee engagement, satisfaction, and business-unit-level outcomes: A meta-analysis*. Omaha, NE: The Gallup Organization.