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AUTHOR Aul, Lynn E., Sr.; Johnson, John A.

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### **ABSTRACT**

Wagner and Sternberg (1985) defined tacit knowledge as knowledge that is usually not taught. They suggest that people who are adept at picking up and accumulating tacit knowledge tend to advance most rapidly in an organization. A study was conducted to determine whether tacit knowledge, as measured by the Tacit Knowledge Questionnaire (TKQ), is related to social insight and/or to certain personality characteristics. The TKQ yields three scores: tacit knowledge for managing one's self in the present job, managing others, and managing one's career. The TKQ, the Chapin Social Insight Scale, and the California Psychological Inventory (CPI) were administered to 20 undergraduate business students. Subscale inter-correlations from the study data replicated Wagner and Sternberg's original finding that tacit business knowledge for managing one's career, managing one's self, and managing others tended to be relatively independent qualities. This finding was reinforced by the tendency for the three subscales to correlate differentially with personality scales defining different factors of the CPI. These findings suggest that tacit business knowledge within the three areas is associated with a unique personality style. (Author/NB)

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Tacit Knowledge, Social Insight, and Personality
Lynn E. Aul, Sr. & John A. Johnson
Pennsylvania State University
DuBois, Pennsylvania

### Abstract

Sternberg and Wagner's Tacit Knowledge Questionnaire was administered with the Chapin Social Insight Scale and California Psychological Inventory to 20 undergraduate business students. Subscale inter- correlations from the present data replicate Wagner and Sternberg's original finding that tacit business knowledge for managing one's career, managing one's self, and managing others tend to be relatively independent qualities. This finding is reinforced by the tendency for the three subscales to correlate differentially with personality scales defining different factors of the CPI. Apparently, tacit business knowledge within the three areas is associated with a unique personality style.

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- (1) Title of Paper: Tacit Knowledge, Social Insight, and Personality
- (2) Topical Session Preference: Organizational-Industrial, Personality

  Measurement
- (3) Problem or Major Purpose:

# The Nature of Tacit Knowledge

Wagner and Sternberg (1985) use the term "tacit knowledge" to describe "knowledge that usually is not openly expressed or taught." Because employees rarely talk about tacit knowledge, it must be acquired through careful observation, intuition, and insight. Wagner and Sternberg suggest that people who have a knack for picking up and accumulating tacit knowledge tend to advance most rapidly in an organization.

Wagner and Sternberg (1985) have proposed a way to measure tacit knowledge. They wrote descriptions of a dozen on-the-job situations with 9-12 options for dealing with each situation. Subjects were asked to rate how important it would be to consider each option if they were to deal with the job situation. Wagner and Sternberg then examined differences between the options deemed to be important by managers in Fortune 500 companies and options chosen by inexperienced business students. These differences provided a scoring system for tacit knowledge acquired through experience. Finally, Wagner and Sternberg tested a separate group of bank employees, and found that scores on their tacit knowledge test predicted salary increases and performance ratings in this group.

Wagner and Sternberg's research indicates that their Tacit Knowledge

Questionnaire (TKQ) validly measures tacit knowledge. Because the measure is

new, however, several unresolved issued must be addressed before the TKQ can be

used confidently in personnel decisions.

A primary question is whether the CKQ measures a unique characteristic heretofore unmeasured, or whether other existing tests also measure tacit



knowledge. Tacit job knowledge sounds like a unique characteristic, but it does resemble what social scientists have called <u>social insight</u> (Chapin, 1942, Gough, 1965). Social insight is the ability to size up social situations and determine accurately others' intentions and motivations. Social insight may be necessary, therefore, to acquiring tacit knowledge.

Tacit knowledge may also be related to certain personality characteristics, which can be assessed with standard inventories like the California Psychological Inventory (CPI; Gough, 1975). Tacit knowledge might, for example, be related to capacity for status ("those qualities of ambition and self-assurance that underlie, and lead to, status"—Gough, 1968, p. 7) or psychological mindedness ("[the tendency to be] psychologically oriented and insightful concerning others"—Gough, 1968, p. 18.)

We tested whether tacit knowledge is related to social insight and personality by comparing TKQ scores with scores on the Chapin Social Insight Test and the CPI.

# (4) Subjects:

Subjects were 29 undergraduate business majors (roughly half male and half female). Failure to complete all measures completely decreased the final N to 20 subjects. Subjects received feedback on their test results in return for their participation in the study.

## (5) Procedures:

Subjects completed The Tacit Knowledge Questionnaire, Chapin Social Insight
Test, and California Psychological Inventory. Responding was anonymous; subjects
identified their test materials by an ID number known only to them.

Tacit Knowledge Questionnaire (TKQ). The TKQ (Wagner and Sternberg, 1985) contains 12 job situations that require a decision from a manager or potential manager in the business world. Associated with each job situation is a list of



points to consider when making the decision. Persons are asked to indicate on a 7-point scale (1 = not important to 7 = extremely important) how important each point would be to them were they making the decision. Correct answers were determined by responses given by successful businessmen. The TKQ yields three scores: tacit knowledge for managing one's self in the present job, managing others, and managing one's career.

Chapin Social Insight Test. The Chapin test (Chapin, 1942; Gough, 1965) contains 10 social situations. Associated with each social situation is a list of four interpretations of the motives of people in the situation. Persons are asked to indicate which interpretation of motivation is most accurate. Correct answers were determined by the responses of a group of persons judged to be socially insightful and perceptive. The Chapin yields one score, overall social insight.

California Psychological Inventory (CPI). The CPI (Gough, 1968; 1975) contains 480 items to which persons respond True or False. Scoring procedures yield scores on 18 different personality traits covering four general areas: emotional stability and maturity, social ascendancy and interpersonal effectiveness, intellectual efficiency and independent thinking, and conventionality. We also scored the CPI for Empathy (Hogan, 1969), which helps define the social ascendancy factor (Greif & Hogan, 1973). The CPI is regarded as one of the best, if not the best available inventory of normal personality (Kelly, 1965; Kleinmuntz, 1967).

Analyses. Means and standard deviations were computed for the TKQ and its subscales to compare the sample's performance to Wagner and Sternberg's normative groups. TKQ intercorrelations were also examined to see if they replicated Wagner and Sternberg's reported intercorrelations. Finally, TKQ total and subscale scores were regressed on the Chapin Social Insight scores and individual



CPI scale scores to determine the degree to which tacit knowledge is related to social insight and personality.

## (6) Results:

Mean scores on the TKQ, presented in Table 1, show that our business undergraduates' mean scores were nearly identical to Wagner and Sternberg's business graduate students, indicating a degree of tacit knowledge greater than what might be found in a non-business population. The intercorrelations of TKQ subscales, also shown in Table 1, are nearly identical to those reported by Wagner and Sternberg—about .3 between Managing Others and Managing Career, and essentially zero for the other intercorrelations.

# Insert Table 1 about here

The correlations of principal interest—those between the TKQ, Social Insight, and the CPI—are also shown in Table 1. The TKQ-Chapin correlations are nonsignificant, indicating that tacit business knowledge is quite different from general social insight. Only a few correlations between the CPI and TKQ reached statistical significance, but those that did were meaningful. TKQ total scores did not correlate significantly with any CPI scales. However, the TKQ subscales showed differential pattern of correlations with the four major clusters of CPI scales identified by years of factor analysis (Megargee, 1972): Emotional Maturity, Social Ascendancy, Intellectual Independence, and Conventionality.

Managing Career tended to correlate only with the CPI scales defining the Social Ascendancy factor (Dominance, Capacity for Status, Sociability, Social Presence, and Self-Acceptance). The trend was for the Managing Career subscale to correlate <u>inversely</u> with these CPI scales, suggesting that persons scoring high on the subscale tend to be cautious, asocial, and unassuming.



Managing Self tended to correlate positively with the CPI scales defining the Emotional Maturity factor (Self-Control, Well-Being, and Good Impression) and the Intellectual Independence factor (Achievement via Independence, Flexibility, Psychological Mindedness, and Tolerance). This suggests that high scorers on this tacit knowledge subscale are emotionally stable, bright, flexible, and open to experience.

Managing Others correlated significantly (and inversely) only with the Socialization scale, which marks the Conventionality factor, suggesting that persons scoring high on this subscale tend to be unconventional. The subscale correlated marginally with the Dominance and Empathy scales from the Social Ascendancy factor. Because managing others requires leadership and empathy, this relationship is not surprising.

## (7) Conclusions:

Strong conclusions cannot be drawn from a single study with a sample size as small as the one in this study. However, the sample tested appeared on the basis of normative data to be representative of persons with some tacit business knowledge, so perhaps some cautious conclusions can be drawn.

The TKQ subscale intercorrelations from the present data replicate Wagner and Sternberg's original finding that tacit business knowledge for managing one's career, managing one's self, and managing others tend to be relatively independent qualities. This finding is reinforced by the tendency for the three subscales to correlate differentially with personality scales defining different factors of the CPI. Apparently, tacit business knowledge within the three areas is associated with a unique personality style. The conclusion would be reinforced with a replicating study, perhaps one in which personality is assessed with an inventory designed specifically to measure traits relevant to job performance (e.g., the Hogan Personality Inventory, Hogan, 1986).



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Table 1 Normative Data and Correlates of Tacit Knowledge Questionnaire

		<u> </u>		
Variable	Managing Self	Managing Others	Managing Career	Total TKQ
Descriptive Statistics				
Mean Standard Deviation	62.5 5.5	18.1 2.6	56.4 11.3	149.3 14.0
TKO Scale Intercorrelations	3.3	2.0	11.5	14.0
The Scale Intercorrelations				
Managing Self Managing Others Managing Career	1.0 01 .04	1.0 .33 <sup>+</sup>	1.0	
Total Score	•35 <sup>*</sup>	•50*	.91**	1.0
Personality Correlates				
Chapin Social Insight Scale	.21	.06	.02	.12
California Psychological Inve	ntory			
Emotional Maturity Factor				
Self-Control	•50*	19	.08	.21
Good Impression	•28	.10	16	.02
Well Being	.25	02	.15	.20
Responsibility	.24	23	27	20
Achievemen' via Conformance		02	02	.04
Social Ascer. ancy Factor				• • •
Dominance	02	•32 <sup>+</sup>	14	04
Capacity for Status	•20	08	<b></b> 37 <sup>+</sup>	25
Sociability	<b>2</b> 3	.15	<b></b> 25	26
Social Presence	29	.19	<b></b> 25	28
Self-Acceptance	14	.11	24	<b>23</b>
Empathy	.04	•30	.00	.09
Intellectual Independence Fa	ctor			
Achievement via Independenc	e .30 <sup>+</sup>	16	.01	.07
Flexibility	.41*	01	.13	.28
Tolerance	•22	<b>1</b> 3	06	<b></b> 03
Psychological Mindedness	.41*	.02	16	.03
Intellectual Efficiency	.00	22	<del>-</del> ,03	09
Conventionality Factor				
Socialization	11	38*	.00	14
Communality	06	12	.05	06
Femininity	.13	19	.06	<b></b> 03



p < .10 p < .05 p < .01 (all one-tailed)