

- Pettigrew, A. (1973) The politics of organizational decision-making. London: Tavistock.
- Pfeffer, J. and Salancik, G. R. (1978). The External Control of Organizations: A Resource Dependence Perspective. New York: Harper and Row.
- Weber, M. (1947) The theory of social and economic organization. London: Routledge and Kegan Paul.
- Williamson, O. E. (1999) Strategy Research: Governance and Competence Perspectives. Strategic Management Journal, 20, 1087-1108

Penz

If you have knowledge, why don't you let others light their candles in it? Motivational aspects of sharing knowledge

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Abstract

In recent years companies widely have accepted the importance of knowledge as a source of economic wealth. Thus, it is not surprising that they concentrated on the management of intellectual capital (e.g. processes, management skills, information about customers, experience). Besides numerous researchers have addressed this topic in many different ways.

From a managerial viewpoint, companies lie much emphasis on the identification of instruments or methods that grasp existing knowledge. Another important issue for them is to enable the creation of knowledge. Finally, as the importance of people as possessors of knowledge is made out, managers are seeking to improve people's ability to share knowledge within and between organizations. The outcome of such processes often is innovation which provides the basis for competitive advantage.

From a psychological perspective, there still exist deficiencies in the research of motivational aspects of so-called knowledge-workers. In particular, there is a scarcity of empirical work examining employees' willingness to share knowledge. This type of research has kept a number of issues untouched, e.g. the natural reluctance of people to share their most precious assets, being their knowledge and experience.

This paper aims at remedying for some of these issues by discussing results from conducted surveys: First, a quota-sample, comprising of 200 Austrian working persons was used. Representations of being rewarded were analyzed and motivational concepts were used to explain and discuss the results. Second, 25 in-depth interviews with project-leaders and consultants concerning knowledge management in general and barriers in particular were conducted.

Keywords: knowledge, motivation, reward system, representation

Phelps & Ambady

The mother's voice: a predictor of the father's impact on their child's adult economic outcomes

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Abstract

A model of personality traits interacting with motives predicted economic outcomes in a 36-year longitudinal study.⁷⁷ Judges ~~who~~ rated "thin slices" (clips of 10 seconds) of filtered voice recordings according to eleven adjectives measured the traits. A Thematic Apperception Test (TAT) measured the motives. The trait "confident" interacting with the affiliation motive predicted higher education and earnings. The trait "emotional" interacting with the power motive predicted higher fertility and lower family income.

⁷⁷ This research used data from three waves of *Patterns of Child Rearing*, a machine-readable data file, available through the archive of the Henry A. Murray Research Center, Radcliffe Institute for Advanced Studies, Harvard University. Robert R. Sears, Eleanor E. Maccoby, and Harry Levin (1952), David C. McClelland (1978), and David C. McClelland and Carol E. Franz (1988) collected the data. The transcription of the archival recordings and the thin slice experiment were financed from funds given to the Murray Center from the John D. and Catherine T. MacArthur Foundation. Grants from the Smith Richardson Foundation and the Murray Center funded the picture-specific coding of motives from the 1978 follow-up.

Keywords: PsycINFO: Thematic Apperception Test (52560); JEL: time allocation, work behavior (J2)

1. Introduction

Winter, John, Stewart, Klohnen and Duncan (1998) used an interactive model of traits and motives to explain the economic behavior of graduates of Mills and Radcliffe colleges. They assumed that traits channel behavior and account for consistency across situations, while "Motives are, ... dispositionally stable and situationally contingent (p.232)." The trait of extraversion interacting with the power motive explained high impact careers. Interacting with the affiliation motive, it explained combining family and work roles. We used the Winter group's assumptions to predict the adult economic behavior of a subset of the children who were observed in a classic study of child-rearing (Sears, Maccoby, and Levin, 1957).

Our model of personality assumes that traits are either heritable or learned in infancy and childhood. Mother-traits, were measured from an analysis of "thin slices" (Ambady and Rosenthal, 1992) of Sears' recordings of mother-interviews. Motives were measured in a TAT that the "children" took during the first follow-up when they were age 31.⁷⁸ Their economic outcomes were reported in the second follow-up when they were age 41. Because the theme of the IAREP/SABE conference is power, the paper focused on the interactions of the trait that was the antecedent of the power motive.

Like the Winter group, we used Winter's (1973) scoring manual for power motivation. However, we made some major changes from their design. First, we used picture-specific motive scores, rather than summing motive scores across situations pictured in the TAT. This procedure exploited the advantage afforded by defining a motive as contingent on situations. Second, we measured traits twenty-

six years before the children reported economic outcomes, whereas the Winter group measured traits at the same time that the subjects reported economic outcomes. The outcomes of the Winter group's subjects and our subjects were measured at approximately the same point in the life span. Third, we included men as well as women in the sample, whereas the Winter group included women only.

We found that subjects' perception of power was sensitive to the "emotional" quality of the mother's voice. The adjective "emotional" was an antecedent of the arousal of power motivation in response to a situation that pictured a man dressed in a naval captain's uniform.

2. Method

2.1 Subjects

The study utilized as raw stimuli 20 audio-tapes transcribed from Sears' dicta-phone recordings of mother interviews.⁷⁹ From the questions that the mothers were asked, three were chosen to represent each of the following dimensions: mother/infant warmth, mother/child warmth and father/child warmth.

2.2 Method

Ten-second clips were taken from the answers of the mothers to these questions. When their answers were uninterrupted from the interviewer, the clips were taken from the middle of the answer; otherwise, when the researcher interrupted the mother, the clips were taken from the beginning or end of the answer. If it was impossible to find a ten-second uninterrupted clip, no clips were taken for that mother. The best quality clip was chosen from each category, leaving 3 clips per mother. These clips were content-filtered using a Macintosh-based computer program (Sound Edit). The content-filtering procedure removed the high frequencies and rendered the clips undecipherable.

⁷⁸ A Thematic Apperception Test is a personality test based on imaginative stories told in response to word or picture cues. There were six picture cues used in the TAT given to the subjects at age 31. Only one picture is discussed in this report. It is of a man dressed in a captain's uniform.

⁷⁹ 32 interviews were transcribed, of which 20 had sufficient acoustic clarity for the thin-slice methodology.

The content-filtered clips were recorded to an audio-tape in a random order. Another condition with the same clips in reverse order was compiled in order to control for order effects.

2.3 Procedure

Thirty-two independent raters (16 males and 16 females, mostly undergraduates) were recruiting through sign-up flyers posted on the Harvard University campus. They judged the content-filtered audio clips on the following dimensions: active, anxious, cheerful, confident, depressed, dominant, emotional, enthusiastic, happy, optimistic, and warm. Subjects were able to rate the clips at their own pace, as they were instructed to pause the tape after each clip, make the rating of the clip, and then listen to the next clip. On average, it took subjects between 45 min and 1 hour to complete the study. When they were done, subjects were debriefed and paid for their participation at the rate of \$8 per hour.

The effective reliability was computed for each dimension (Rosenthal & Rosnow, 1991). Judges' ratings were highly reliable (see Table 1). Therefore data were collapsed across judges by taking the average judges' rating for each mother, question, and variable.

2.3.1 Question effects

Since mothers talked about different relationships in the three kinds of questions asked (mother-infant, mother-child, and father-child), the data were analyzed to explore if the question type had an effect on the rating of the mother. For each dimension, a correlation between the averaged ratings for the three questions was computed. The correlation between the second and third question turned out to be high and significant for all dimensions except for warmth. To decide whether to collapse the data for question numbers two and three, the data were collapsed across dimensions and a new correlation between the questions was run. This analysis yielded a high correlation between question numbers two and three, $r = 0.773$, $p < .0001$, so the data were averaged across those questions.

2. Results

Relationships between Sears' coded parenting variables and the trait "emotional" are shown in Table 2, using multiple regression analysis. Emotional mothers reported that their husbands had a cool relationship (p -value = .001) with their child. They also reported that there was more disagreement with their husbands about child-rearing practices than did mothers who were not emotional (p -value = .022, females; p -value = .062, males). It was necessary to control for Irish ethnicity and gender to reveal the effect of emotional on mother-father disagreement.

The relation between motivation and the trait "emotional" is shown in Table 3. "Emotional," controlled for Irish ethnicity and gender, predicted perception of power in the picture of the captain, F -ratio (3, 8) = 5.012, $p = .077$. When the adjective "warm" was added to the control variables, the significance of the coefficient of "emotional" increased to $p = .000$.

Table 4 shows the results of regressions of family income, earnings, job tenure, education, fertility, work satisfaction, and parental satisfaction on traits and motives. Control variables are noted in the footnotes and qualify each of the findings that follow. The trait "confident" predicted higher family income, earnings, and education. The trait "emotional" predicted lower job tenure, lower education, higher fertility, higher work satisfaction, and higher parental satisfaction. Power imagery evoked in response to the captain cue predicted lower family income, lower job satisfaction, and lower parental satisfaction. Affiliation imagery evoked in response to the captain cue predicted lower earnings, longer job tenure, and lower education. Women had lower education and earnings, a finding consistent with other econometric studies. In this sample they also had more children than the men. Economists regard the decision to have children as an economic variable because it entails the allocation of time, a scarce resource. As such, it influences the labor force participation decision. It also influences the intensity of work effort, for example, the number of hours worked.

4. Discussion

The results are consistent with the hypothesis that subjects, who were reared in a family with an "emotional" mother, a cold father, and many parental arguments about child-rearing practices, made important economic decisions that reduced their standard of living. First, they had fewer years of education and fewer years of on-the job training than other subjects had. Therefore they earned commensurately lower rates of return to their investments in human capital (Becker, 1964). Second, they had more children than other subjects, reducing the family income per person in the household. In an analysis of the 1976 survey of American mental health, Phelps (1998) found a negative impact on earnings and family income that was attributable to having been reared in a family that was disrupted by divorce. The

Patterns data suggest that conflict that does not culminate in divorce has a negative impact on the economic outcomes of children.

It is interest to observe that, according to the regressions that measured work satisfaction and parental satisfaction, the trait "emotional" was not the proximate cause of decrements in outcomes. Rather it was the expression of the trait in a situation that the subject perceived as a confrontation with a person in authority that accounted for the negative impact. Only one subject, a woman, projected affiliation thoughts on the captain cue. It is hypothesized that her earnings were lower than those of other subjects, because the gain due to her investment in on-the-job training was not sufficient to compensate for her loss in formal education.

5. Tables

Table 1: Inter-rater Reliability for 31 Judges

Adjective	Reliability
Active	.890205205
Anxious	.932918021
Cheerful	.940825835
Confident	.930895320
Depressed	.938381150
Dominant	.934306699
Emotional	.933876428
Enthusiastic	.938951741
Happy	.940561339
Optimistic	.938951741
Warm	.935965028

*Table 2: Sears' Parental Warmth Variables as a function of Adjective Ratings
OLS Regressions: FCW and MFD, dependent variables*

Dependent Variable	Trait	F-ratio, df, sig.
FCW ⁸⁰	Emotional (+)	7.715(6,15), p = .006 (Allsubj)
(Father-warmth)	Warmth (-)	
MFD ⁸¹	Emotional (+)	4.483(3,9), p = .070 (Females)
(Disagreement)	Emotional (+)	9.187(3,6), p = .100 (Males)

⁸⁰ High values of FCW = cool. Control variables: socio-economic status family of origin, gender, Irish, number of children in family of origin.

⁸¹ High values of MFD = much disagreement. Control variable: Irish in both female and male samples.

Table 3: Power motivation projected on the Captain cue as a function of Trait
 OLS Regressions: Raw power score, dependent variable

Trait	F-ratio, df, sig.
Emotional (+)	863.468 (4,8), p=.000(Allsubj) ⁸²
Warm (-)	
Emotional (+)	5.012(3,8), p=.077

Table 4: Economic outcomes as a function of Traits and Motives
 OLS Regressions: Family income, earnings, job tenure, education, fertility, work satisfaction
 and parental satisfaction at age 41, dependent variables

Dependent Variable	Motive	Trait	F-ratio, df, sig.
Family income	Power Capt. (-)	Confident (+)	20.505 (2, 6), p=.018(Allsubj)
Earnings	Affil. Capt. (-)	Confident (+)	9.415 (4, 9), p=.026 (Allsubj)
Job tenure ⁸³	Affil. Capt. (+)	Emotional (-)	39.666 (4, 7), p=.025(Allsubj)
Education ⁸⁴	Affil. Capt. (+)	Confident (+)	14.183 (5,10),p=.012(Allsubj)
		Emotional (-)	
Fertility ⁸⁵	Affil. Bench (+)	Emotional (+)	10.938 (4, 9), p=.020(Allsubj)
		Confident (-)	
Work satisfaction	Power Capt. (-)	Emotional (+)	12,790 (2, 7), p=.018 (Allsubj)
Parent satisfaction	Power Capt. (-)	Emotional (+)	22.843 (2, 7), p=.006(Allsubj)

References

Ambody, Nalini & Rosenthal, Robert (1992). "Thin Slices of Expressive Behavior as Predictors of Interpersonal Consequences: A Meta-analysis," *Psychological Bulletin*, 111, 256-274.

Becker, Gary S. (1964). *Human Capital*, (Columbia University Press, New York).

Rosnow, R. & Rosenthal, R. (1991), reference incomplete.

Phelps, Charlotte D. (1998). "Gender Differences in the Long-term Economic Consequences of Parental Divorce," *Journal of Economic Behavior and Organization*, 37, 151-168.

Scars, Robert R., Maccoby, Eleanor E., & Levin, Harry (1957). *Patterns of Child Rearing* (Row, Peterson, Evanston, Ill.).

Winter, David G (1973). *The Power Motive*. (Free Press, New York)

Winter, David G; John, Oliver P.; Stewart, Abigail Klohnen, Eva C.; & Duncan, Lauren E. (1998). "Traits and Motives: Toward an Integration of Two Traditions in Personality Research," *Psychological Review*, 105 (2), 230-250.

⁸² Control variables: gender, Irish, and "warm" in the first regression. "Warm" was excluded from the second regression. All subjects included in both regressions.

⁸³ Control variable: socio-economic status family of origin.

⁸⁴ Control variables: gender, socio-economic status family of origin.

⁸⁵ Control variable: gender.



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