

## An Examination of Intraoccupational Differences: Personality, Perceived Work Climate, and Outcome Preferences

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The present study indicates that individuals belonging to intraoccupational concentrations are distinguishable in terms of personality, perceived work climate, and outcome preferences. Subjects were 425 public and industrial accountants identified from a national survey. Scales from the California Psychological Inventory successfully discriminated suboccupations within male and female samples. Countervalent discriminant weights within gender subgroups were interpreted within a sex role incongruity framework. Intraoccupational differences were also found for both sexes in perceived work climate and outcome preferences. Implications of intraoccupational delineations for career development and human resource planning are discussed. © 1985 Academic Press, Inc.

From an individual perspective, career decisions involve recognizing attractive types of activities within a broad occupational category or work environment while excluding less attractive alternatives. Stated differently, the career choice process may be described as an exercise

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in discriminating among progressively narrower classes of occupational stimuli. In contrast, career or vocational specialists, perhaps because of the taxonomic bent of career counseling, tend to interpret occupational stimuli in terms of increasingly broader categories (Holland, 1976). This interpretation assumes that career choices are effected through the translation of specific career proclivities into the set of a general occupational area (Crites, 1969).

It has been recently suggested that research in career choice should go beyond differentiating occupational areas and focus more on intraoccupational considerations (Cullen, 1983; Erez & Shneorson, 1980, Zytowski & Hay, 1984). Given current tendencies for greater specialization and division of work within organizations and higher heterogeneity in organizational environments, more narrowly defined occupational categories are likely to become valuable in career development and human resource planning. Individuals working within the same general occupational area might be more accurately grouped not only in terms of organizational task activity and environment but also by career interests, needs, or preferences (Erez & Shneorson, 1980).

The notion of intraoccupational differentiation has received support in a variety of studies. For example, Erez and Shneorson (1980) compared engineers and management scientists holding either academic or industrial positions. Using personality type and motivational characteristics as discriminators, they showed that persons performing different job activities differed systematically despite belonging to the same occupational discipline. Brown, Grant, and Patton (1981) determined that engineering-trained managers could be differentiated from practicing engineers on the basis of their California Psychological Inventory (CPI) responses. Using interest and personality variables for classification, Dunnette (1957; Dunnette, Wernimont, & Abrahams, 1964) found type of activity (e.g., research, development) rather than professional area (e.g., chemical, electrical) most accurately predicted engineers' group membership. Finally, there are several studies generally suggesting that even within academic settings, individuals in the same discipline or department may value work outcomes in such a manner that activity preferences can be used to distinguish subgroups (Holstrom & Beach, 1973; Snyder, Howard, & Hammer, 1978).

Interestingly, most suboccupational research has dealt with academic-based or technology-dominated areas where requisite job activities are more specialized and defined. Under such conditions, individuals with particular attitudes or interests would more naturally gravitate into suboccupational activity tracks. The purpose of the present research was to determine if suboccupational delineations are detectable within business rather than technically oriented occupations. The accounting discipline was chosen as a representative area of study because it is a basic business

activity and requires a skill/knowledge base defined clearly enough to warrant treatment as an occupational area. Rather than focus on objective task activity as a discriminating variable, this study sought to determine if intraoccupational differences could be determined using person variables. This was done since evidence suggests that person variables (e.g., interests, perceptions, preferences) are salient components of career decision making (London & Stumpf, 1982).

A traditional method of operationalizing career tendencies has been through personality, the assumption being that individuals select occupations perceived to fit their personality patterns (Holland, 1976). If one were able to ascertain personality markers of various occupational areas as well as those of career aspirants, more congruent career choices could be made through aspirant-occupation matching. Toward this end, several studies have examined accountants (as a group) for distinct personality characteristics. Some studies have uncovered attributes such as concern for detail and lack of creativity (Maslow, 1965, pp. 214-215), conformity to social norms, high emotional control, and rigidity (Segal, 1961; Segal & Szabo, 1964).

In contrast to the stolid image portrayed in such studies, DeCoster and Rhode (1971) found Certified Public Accountants (CPAs) higher in sociability, self-acceptance, self-control, and good impression than members of other professional occupations. Elsewhere, Aranya, Barak, and Amernic (1981) found that personality pattern of CPAs could be distinguished by combinations of Holland's Conventional, Enterprising, and Social types. Interestingly, Aranya et al. (1981) and DeCoster and Rhode (1971) note that heterogeneity within the accounting profession may explain the reported contrast in personality characterizations. Given admonishments for intraoccupational research, one research objective was to determine if personality characteristics could discriminate subgroups within the accounting field.

A second research objective was to determine if intraoccupational groups differed in perceptions of their organizations' work environments. Individuals comprising intraoccupational groups may be subject to variant organizational forces which differentially alter their work perceptions. Although a case for subsystem climates in organizations has been made (Powell & Butterfield, 1978), consideration of climate perceptions across organizations in the same occupational area has been little explored (see Sheridan, Vredenburgh, & Abelson, 1984). Some researchers feel that climate should refer to an area of investigation bound only by the context of a particular research question (Muchinsky, 1976; Schneider, 1975). The use of climate to differentiate occupations is supported by findings suggesting that organizational processes and task/role attributes are represented in derived perceptual dimensions (James & Jones, 1976; Jones & James, 1979). If this representation is strong enough and occurs dif-

ferentially within accounting areas, intraoccupational differences in climate perceptions should appear.

A final research objective was to determine if outcome preferences are useful in uncovering intraoccupational divisions. To the degree that outcomes vary within an occupation and are perceptible to career entrants, outcome preference differences might occur along division lines. For example, assuming varying status needs among career *entrants*, if one subarea was perceived higher in status than another, *incumbents* of the first subarea would be expected to show greater concern for status as a work outcome. This assumes that people gravitate toward areas that are subjectively more attractive. Previous research suggests that this assumption is tenable: Wheeler and Mahoney (1981) found that expected work outcomes influence occupational choice, and Erez and Shneorson (1980) determined that intraoccupational variation may be expressed in terms of outcome preferences.

## METHOD

### *Sample*

Part of a larger study, the subjects were 425 public and industrial accountants identified from a national survey of accounting professionals. Participants in the survey were randomly drawn from the membership lists of the Association of Government Accountants, American Society of Certified Public Accountants, National Association of Accountants, and American Association of Women Accountants. Subgroups were identified by selecting only those individuals who had worked exclusively as CPAs (in public accounting) or industrial accountants (non-CPAs) during their career. The male comparison group contained 49 CPAs and 142 industrial accountants; the female comparison group, 125 CPAs and 109 industrial accountants. There were no significant age differences between CPAs and industrial accountants, with 65% of the industrial accountants and 75% of the CPAs falling within a 20–39 age range. Although no significant difference in education occurred between male suboccupational groups, one did occur within the female sample ( $p < .01$ ): a greater percentage of female CPAs had attained college degrees.

### *Measures*

The California Psychological Inventory (CPI; Gough, 1975) was used because it focuses on personality characteristics that are important for social interaction and is relevant for use with nonclinical populations (Siegal, 1958). The CPI contains 18 scales that are categorized into four content divisions: (a) Poise, Self-Assurance, and Interpersonal Adequacy; (b) Socialization, Responsibility, and Maturity; (c) Achievement Potential and Intellectual Efficiency; and (d) Intellectual and Interest Modes. The

CPI is generally unaffected by demographic variables like age or education (Dyer, Monson, & von Drimmelen, 1971) and has been used to examine accountant personality characteristics (DeCoster & Rhode, 1971, 1972) and intraoccupational differences in engineering (Brown et al., 1981).

Climate factors were constructed using the Litwin and Stringer (1968) Organizational Climate Questionnaire (LSOCQ). The LSOCQ contains fifty 7-point Likert scale items pertaining to climate facets. Since the soundness of a priori LSOCQ item scales has been questioned (Rogers, Miles, & Biggs, 1980), a factor analysis involving all survey respondents was conducted to derive factors for use in this study. A minres oblique ( $\delta = -.5$ ) analysis yielded a 7-factor solution.<sup>1</sup> There was reasonable congruence between six of the factors derived and a priori LSOCQ scales. Items loading on these six factors are listed by LSOCQ number in parentheses below. Italicized items denote where an item loaded on both a derived factor and its equivalently named LSOCQ scale. The six scales were as follows: (a) Structure (*1,2,3,6,7,14,15*); (b) Responsibility (*10,11,12,13*); (c) Warmth (*27,28,29,30,31,34*); (d) Reward (*16,17,18,20,33,35*); (e) Pressures–Standards (*37,38,39*); and (f) Risk (*22,23,24,25,26*). Exemplary items for each of the six scales were as follows: (a) Structure, “The jobs in this organization are clearly defined and logically structured”; (b) Responsibility, “Our philosophy emphasizes that people should solve their problems by themselves”; (c) Warmth, “A friendly atmosphere prevails among the people in this organization”; (d) Reward, “In this organization, people are rewarded in proportion to the excellence of their work”; (e) Pressures–Standards, “Around here there is a feeling of pressure to continually improve our personal and group performance”; (f) Risk, “Our management is willing to take a chance on a good idea.” The derived factor not corresponding to a corresponding a priori scale was labeled Accommodation and was comprised of LSOCQ Standards and Conflict items (41,42,43) depicting an organization as a place where acquiescence and conflict avoidance are deemed important. An example item is “To get ahead in this organization, it’s more important to get along than it is to be a high producer.” With the exception of the Responsibility factor ( $\alpha = .69$ ), coefficient  $\alpha$  for all derived factors was .70 or above (average  $\alpha = .78$ ).

Relevant outcome preferences were selected from a listing of items used to examine why the respondent chose accounting as a career. Eight items could be interpreted as outcomes expected to accompany accounting activities: providing service to society, interesting work, enjoyment of working with numbers, salary, prestige, opportunity for professional status, security, potential for working at home. Subjects checked yes for an outcome if it influenced their career selection.

<sup>1</sup>Detailed factor analysis results are available from the first author.

### Analysis

Owing to problems concerning the comparison of males and females on the CPI (Gynther, in press), CPA and industrial subgroup comparisons were conducted within gender delineations. For purposes of consistency, climate perceptions and outcome preferences were examined similarly. The CPI scales and climate factors were subjected to separate stepwise discriminant analyses using CPAs and industrial accountants as criterion groups. The Statistical Package for the Social Sciences (Hull & Nie, 1981) was employed for this purpose. Only scales contributing significant ( $p < .05$ ) incremental information were entered into the discriminant function. Linear discriminant function (LDF) weights and LDF-scale correlations were used for interpretation (Huberty, 1984). An LDF weight is actually a partial coefficient that emphasizes the discriminatory variance unique to a particular variable, after others have been added to the LDF. As a result, the LDF weight may be unduly influenced by variable intercorrelations at each stage of a stepwise analysis. The LDF-variable correlations indicate the "loadings" of original variables on the LDF they comprise and are not as sensitive to covariation with other LDF variables.

Outcome preferences, having been operationalized at a nominal scale of measurement (no = 0, yes = 1), were examined using the  $\chi^2$  test statistic. The CPAs and industrial accountants' yes-no response frequencies were compared for each relevant outcome. More sophisticated measures of outcome preferences such as the Minnesota Importance Questionnaire (Gay, Weiss, Hendel, Dawis, & Lofquist, 1971) and the Work Values Inventory (Super, 1970) are available. However, despite being somewhat primitive, the method selected for measuring outcome preferences was judged to best serve the stated research objectives.

## RESULTS

The means and standard deviations of CPI scales included in the discriminant functions for males and females are listed in Table 1 along with the standardized discriminant weights and LDF-scale correlations. Within the male comparison sample, the centroids of the CPA and industrial accountant groups differed significantly, as indicated by the  $F$  ratio,  $F(5, 185) = 7.08$ ,  $p < .0001$ , and Wilks'  $\lambda$  ( $\lambda = .83$ ), which approximates a  $\chi^2$  of 32.65, also significant beyond the  $p < .0001$  level. The discriminatory power (Tatsuoka, 1970) of the CPI scales was  $\omega^2 = .15$ . The scales serving as the best discriminators between the groups were Responsibility, Self-acceptance, Socialization, and Intellectual Efficiency. The direction of each scale's contribution to the LDF is shown by the sign of the weight (or correlation). A positive sign signifies that a scale was higher for the industrial accountants and a negative sign indicates one on which CPAs scored higher.

TABLE 1  
CPA vs Industrial Accountants: Discriminant Analysis Summary for California  
Psychological Inventory Scales

Variable	CPA		Industrial		Discriminant weight	LDF-scale correlation
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<b>Males</b>						
Responsibility	28.69	5.18	30.70**	4.19	.58	.45
Self-acceptance	22.93	3.04	21.70**	3.95	-.84	-.33
Self-control	30.35	6.82	30.08	7.43	-1.12	-.04
Socialization	35.69	5.67	37.75**	4.82	.67	.41
Intellectual efficiency	38.16	4.29	39.40*	4.78	.53	.27
<b>Females</b>						
Self-acceptance	22.09	3.78	20.99**	3.51	-1.25	-.62
Socialization	39.29	5.13	38.26	4.94	-.62	-.42
Dominance	30.26	6.32	30.11	5.99	.77	-.05

*Note.* Scales are listed in the order of entry into the discriminant functions.

\* Means are significantly different,  $p < .10$ .

\*\* Means are significantly different,  $p < .05$ .

The large disparity between the LDF weight and LDF-scale correlation for Self-control suggested it was suppressing between-group variance not relevant for differentiating CPA and industrial subgroups (Anastasi, 1982). For descriptive purposes, this disparity was examined. Intercorrelations of group membership (CPA = 1, industrial = 2), Self-control, Responsibility, and Self-acceptance were computed since the latter two scales entered the LDF before Self-control. Both Responsibility and Self-acceptance were significantly correlated with group membership while Self-control was not. Moreover, Self-control strongly correlated with Responsibility and Self-acceptance, suggesting the occasion for a suppressor effect. When variance common to Responsibility and Self-control was controlled through partial correlation, the relationship between Self-control and group membership became significant confirming the suppressor effect. This did not occur with Self-acceptance.

The centroids of the female groups were also significantly different ( $F(3, 230) = 4.53, p < .005; \lambda = .94, \chi^2 = 13.22, p < .005, \omega^2 = .05$ ). Both Self-acceptance and Socialization served to differentiate CPA and industrial accountant groups. For Dominance, a large discrepancy was found between an LDF weight and LDF-scale correlation. This scale was tested as a suppressor and found to be reducing superfluous between-group variance connected with Self-acceptance.

Information relevant to the climate discriminate functions for males and females is given in Table 2. Within the male sample, CPA and industrial accountant centroids differed significantly ( $F(2, 183) = 19.4,$



TABLE 2  
CPA vs Industrial Accountants: Discriminant Analysis Summary for Climate Factors

Variable	CPA		Industrial		Discriminant weight	LDF-scale correlation
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Males						
Accommodation	1.46	.58	2.38	1.02**	.85	.93
Pressure	5.12	1.33	4.32	1.38**	-.38	-.55
Females						
Accommodation	1.91	.79	2.55	1.02**	.67	.69
Pressure	4.76	1.32	4.03	1.37**	-.66	-.54
Risk	4.03	1.01	4.14	1.18	.44	.10
Warmth	5.56	1.13	5.06	1.24**	-.33	-.41

Note. Scales are listed in the order of entry into the discriminant function.

\*\* Means are significantly different,  $p < .05$ .

$p < .0001$ ;  $\lambda = .82$ ,  $\chi^2 = 35.19$ ,  $p < .0001$ ,  $\omega^2 = .16$ ). The only climate factors entering into the discriminant function were Accommodation and Pressure. The discriminant weights and LDF-scale correlations indicated industrial accountants perceived that their organizations placed more value on the status quo while CPAs perceived more pressure in their organizational environs. Female CPA and industrial accountant centroids also differed significantly ( $F(4, 214) = 14.03$ ,  $p < .0001$ ;  $\lambda = .79$ ,  $\chi^2 = 50.08$ ,  $p < .0001$ ,  $\omega^2 = .20$ ). Interestingly, Accommodation and Pressure entered the function in the same sequence as for males. Two other climate factors, Risk and Warmth, provided for additional between-group discrimination in the female sample. Overall, Accommodation, Pressure, and Warmth appear to be the most important discriminators, suggesting differences similar to those found for males with the additional element of greater organizational warmth perceived by female CPAs.

For the male sample, responses to four work outcomes were found to be associated ( $\chi^2$ ) with membership in the two criterion groups: providing service to society ( $p < .01$ ), prestige ( $p < .005$ ), interesting work ( $p < .01$ ), and salary ( $p < .005$ ). On all of these outcomes, CPAs indicated more frequently that the outcome influenced their career choice. For females, responses to three outcome preferences were associated with group membership: providing service to society ( $p < .01$ ), prestige ( $p < .02$ ), and enjoyment of working with numbers ( $p < .005$ ). The CPA respondents checked service to society and prestige more frequently while industrial accountants more frequently indicated that working with numbers influenced their career decision.

## DISCUSSION

Present results suggest that person variables such as personality, perceived work climate, and outcome preferences are useful in obtaining

intraoccupational information. In the male sample, discriminating CPI scales portrayed CPAs as more aggressive, sharp-witted, and persuasive but less controlled and more self-centered. Industrial accountants were depicted as more conscientious, deliberate, and obliging. Two of the scales that separated the male suboccupations also discriminated between the female subgroups. Female CPAs gave indications of being more sharp-witted and persuasive but were higher in Socialization (i.e., obliging and conscientious) than their industrial counterparts.

The countervailing weights of Socialization for males and females may be attributable to the differing impact of socialization processes on their careers. Industrial accountants would probably operate in larger, more bureaucratic organizations where socialization demands (Schein, 1968) require more conformity to the "local" norms of the firm. In contrast, CPAs are more apt to perform professionally standardized functions, allowing them more independence from client firms. Their socialization process may demand a more "cosmopolitan" air, promoting greater allegiance to the profession than to a specific organization. Not surprisingly, then, male industrial accountants exhibited higher Socialization scores.

The negative discriminant weight found for females indicates that industrial accountants tend toward less socialization than female CPAs. Research suggests that women entering male-dominated settings (i.e. industry) in traditionally male occupations like accounting (cf. Brown, 1981) will experience sex role incongruity (Deaux, 1984). Females entering a male sex-typed role may fare better if they are capable of handling sex role incongruity problems. A less obliging, more take charge disposition should help in this regard. In contrast, female CPAs should not need such personality defenses as they are afforded protection by professional accounting standards and procedures.

With respect to climate perceptions, CPAs of both sexes viewed their organizational climates as placing less importance on accommodative behavior and more emphasis on performance than did industrial accountants. Competitive and professional pressures are more apt to be part of their organizational reality since CPAs are more likely to be subject to professional standards and serve in consultative capacities. Conversely, since industrial accountants will belong to organizations where accounting is but one function among many, accommodation may be more appropriate. Finally, female CPAs' perception of greater warmth may reflect some of the same sex role incongruity dynamics discussed above. That is, given that female CPAs receive greater operational protection from professional standards and procedures, they are in a better position to be "accepted" by their similarly professional male counterparts. Female industrial accountants may encounter more buffeting from the male dominated bureaucracy found in many industrial organizations.

Regarding outcome preferences, two outcomes—prestige and providing

service to society—differentiated subgroups within both male and female samples. The CPAs felt their work would have higher status and visibility and allow them to make more of a contribution to the community. These distinctions are again logical since CPAs are more likely to function in consultant roles whereas industrial accountants are apt to perform more internally oriented duties for one firm. Greater emphasis on certification in the CPA area may also contribute to differences in the prestige perceived to accompany CPA work. That male CPAs cited salary and interesting work as career choice influences is consonant with the expectation that higher salaries and interesting work accompany more prestigious work activities. With the exception of one item (preference for quantitative work), males and females exhibited common outcome expectations. A cross-gender commonality of values and preferences has been supported with other samples (e.g., Kaufman & Fetters, 1980).

The notion of intraoccupational delineations suggests broad implications for human resource managers facing such distinctions. Assuming that organizational choice is influenced by occupational choice (Wanous, 1979), intraoccupational differences in outcome preferences and climate perceptions could interact with organizational socialization. During the exploration phase of career development (London & Stumpf, 1982), employees are subject to socialization pressures requiring adjustments in prework expectations. To the degree that newcomers' values are incongruent with the organization's and cannot be adjusted, they will experience dissatisfaction (Webber, 1976). Delineating occupational subgroups within organizations may render pivotal values more identifiable, potentially smoothing the socialization process. Organization-individual misfits might be discovered early and individuals with values too aberrant would be able to voluntarily withdraw and pursue more amicable employment. Managerial awareness of subgroup personality delineations could also translate into greater congruency between individuals and organizational systems. Employees might profit personally from career planning information that contrasts their personalities with those who have gravitated to a particular suboccupational track. Though any "fast-tracking" of employees must be based on more than personality, personality information may facilitate such decisions (e.g., Harrell & Harrell, 1973).

As intraoccupational differences could impact on organization-individual fit so too might they influence organizations' motivational strategies. Where subgroups prefer different outcomes, expectancy theory notions of outcome valence suggest that supplying appropriate outcomes will increase motivation. In this vein, Mossholder and colleagues (Mossholder & Dewhirst, 1980; Mossholder, Dewhirst, & Arvey, 1981) found development and research personnel were distinguishable as intraoccupational groups and that they differed in their affective reactions to management-by-objectives (MBO). Though their research did not examine

specific outcome preferences, it suggests that motivational system adjustments might be made to better suit subgroup preferences.

Some caveats regarding this study are in order. The study was an initial attempt to determine if person variables were useful for discovering intraoccupational distinctions. Future research should focus on identifying useful delineations in occupations where the range of tasks performed are of sufficient heterogeneity. Given both increasing personnel demands and skills requirement shifts (Rumberger, 1981) in technological occupations, such areas may be the logical targets of such efforts. It is also recommended that gender be considered in any such research. Males and females did exhibit similar intraoccupational differences in outcome preferences. However, this condition held to a lesser degree for personality and climate perceptions, intimating sex may influence the nature of some intraoccupational distinctions.

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