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Abstract

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Disciplines

Business Administration, Management, and Operations | Business Intelligence | Business Law, Public Responsibility, and Ethics | International Business | Management Sciences and Quantitative Methods

Comments

This article is published as Morrow, P.C. 1983. Concept redundancy in organizational research. The case of work commitment. *Academy of Management Review*, 8: 486-500. Doi: 10.5465/AMR.1983.4284606. Posted with permission.

Concept Redundancy in Organizational Research: The Case of Work Commitment¹

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A facet design describing the theoretical and empirical interrelationships among five forms of work commitment (Protestant work ethic, career salience, job involvement/work as a central life interest, organizational commitment, and union commitment) is presented. The analysis reveals that these concepts are partially redundant and insufficiently distinct to warrent continued separation. Suggestions for advancing the study of work commitment are rendered.

Commitment to work is a topic of long standing interest to management scholars, as evidenced by the proliferation of concepts (job involvement, etc.) designed to operationalize the construct. Commitment typically is valued by practitioners on normative grounds-managers prefer loyal and devoted employees. Unfortunately, the growth in commitment related concepts has not been accompanied by a careful segmentation of commitment's theoretical domain in terms of intended meaning of each concept or the concepts' relationships among each other. The result has been the formation of over 25 commitment related concepts and measures. The purposes of this paper are to review and compare the major forms of work commitment, to explore their theoretical and empirical interrelationships, and to offer suggestions for improving the utility of the construct.

In order to accomplish these objectives, a research procedure known as facet design (Guttman, 1954; Shapira & Zevulun, 1979) is employed. Facet design is a research methodology that entails, in part, the inductive generation of criteria that reveal similarities and differences among a set of related concepts. The procedure can be used for taxonomy, hypothesis generation, or hypothesis testing purposes and previously has been used to bring order to research areas marked by conceptual chaos—for example, organizational development (White & Mitchell, 1976)

and organizational climate (Payne, Fineman, & Wall, 1976). In this research, facet design will be employed as a preliminary taxonomic device seeking to clarify understanding of the overarching commitment construct.

Major Forms of Work Commitment

A review of work commitment concepts used in organizational research indicates that many researchers have elected to formulate their own definition and measure of work commitment rather than rely on an existing approach to commitment. Evidence for this observation is contained in Exhibit 1, in which 30 forms of work commitment and their formulators are listed. An examination of the authors' definitions of these concepts (see Table 1) reveals some wide differences in intended meaning. For example, it is logical to presuppose that individuals might view work as a determinant of their intrinsic worth but feel no special loyalty to the employing organization or union. Wiener and Vardi (1980) have generated empirical support for this argument by demonstrating that differences exist in organizational, job, and career commitment within two separate samples. Some have argued that professional commitment (career salience) is antithetical to organizational commitment (Tuma & Grimes, 1981). On the other hand, some forms of work commitment necessarily appear to overlap. Individuals who regard their jobs as a central aspect of life would be unlikely to devalue the

^{&#}x27;The author would like to thank Jeffrey H. Greenhaus, James C. McElroy, and Paul M. Muchinsky for their critiques of earlier drafts of this manuscript.

importance of their careers. Work commitment notions therefore appear to embody both unique and redundant components. In order to articulate these differences, similar forms of work commitment have been grouped according to their major focus (i.e., personal values, career, job, organization, and union). These foci are more fully described in Table 1. There also is a category that reflects those concepts that seek to combine foci of commitment.

The proliferation of these concepts has been far from evolutionary. Dubin's (1956) central life interest and Lodahl and Keiner's (1965) job involvement are among the oldest concepts and are still commonly used. However, of the 29 concepts in Exhibit 1, 10 have been devised in the last 6 years. Because such a pattern does not suggest a rational, developmental approach to the study of work commitment, it is appropriate to call a moratorium on new commitment concepts until some evaluation of existing perspectives has been completed. The choice of concepts to be evaluated was based essentially on one criterion, frequency of use in organizational behavior literature as discerned through a computerized search (i.e., social sciences citation index) of commitment related key words in article titles in relevant journals from 1969 to 1980. No attempt was made to incorporate classic or case-oriented literature embracing work commitment—for example, Dalton (1959). Concepts representative of these foci include: Protestant work ethic endorsement (Blood, 1969; Mirels & Garrett, 1971); career salience (Greenhaus, 1971); job involvement (Lodahl & Keiner, 1965); work as a central life interest (Dubin, 1956); organizational commitment (Mowday et al., 1979); and union commitment (Gordon et al., 1980). It should be noted that two forms of job focus commitment (job involvement and work as a central life interest) are recognized and evaluated separately because of their very different and independent historical evolutions.

Exhibit 1 Forms of Work Commitment

Value Focus

Protestant work ethic endorsement (Blood, 1969)

Protestant work ethic endorsement (Mirels & Garrett, 1971)

Conventional ethic (pride in work) subscale of survey of work values (Wollack, Goodale, Witjing, & Smith, 1971)

Work ethic (Buchholz, 1978)

Career Focus

Career commitment (Quadagno, 1978)

Career salience (Greenhaus, 1971)

Career salience (for women) (Almquist & Angrist, 1971)

Commitment to a profession (Sheldon, 1971)

Job involvement (personal identification with work dimension, four items from Lodahl & Kejner, 1965, popularized by Lawler & Hall, 1970).

Job orientation (Eden & Jacobson, 1976)

Job attachment (Koch & Steers, 1978)

Job involvement (Patchen, 1970) Ego-involvement (Slater, 1959; Vroom, 1962)

Work as a central life interest (Dubin, 1956)

Organization focus

Organizational commitment (calculative, moral dimensions) (Mowday, Steers, & Porter, 1979)

Organizational commitment (calculative dimension) (Hrebiniak & Alutto, 1972; Stevens, Beyer, & Trice, 1978)

Organizational identification (moral dimension) (Hall, Snyder, & Nygfren, 1970)

Organizational commitment (moral dimension) (Buchanan, 1974)

Union Focus

Union commitment (Gordon, Philpot, Burt, Thompson, & Spiller, 1980)

Various attitudes toward union scales could be construed as commitment measures

Combined Dimensions of Commitment

Job involvement (6 and 20 item versions) (Lodahl & Keiner, 1965)

Work values (Cherrington, Condie, & England, 1979)

Occupational involvement (Faunce, 1959)

Willingness to accept an annuity (Kaplan & Tausky, 1977)

Career orientation (Gannon & Hendrickson, 1973)

Involvement (Beehr, Walsh, & Taber, 1976)

Job involvement (Green, 1967; used by Reitz & Jewell, 1979)

Other subscales of survey of work values (Wollack et al., 1971)

Organizational involvement (alienative, calculative, moral dimensions) (Etzioni, 1961; Gould, 1979)

Organizational identification (Miller, 1967)

Table 1
Facet Analysis of Work Commitment

	Forms of Work Commitment						
Facets of Analysis	Value Focus		Career Focus	Job Focus	Organizatio Focus	on Uni Foc	
Representative concepts	1) Protestant work ethic endorsement (Blood) 2) Protestant work ethic endorsement (Mirels & Garrett)		Career salience (Greenh a us)	1) Job involveme (Lodahl & Kejne 2) Work as a cent life interest (Dub	er) commitmen ral day et al.)		on commitment rdon et al.)
Focus of concept	The intrinsic value of work as an end in itself		Perceived impor- tance of one's career	1) The degree daily absorption work activity; 2) The degree which the total j situation is cent aspect of life	in ty to one's ing firm to ob	employ- ty to	otion and loyal- o one's bargain- unit
Definition	finition 1) Extent to person a fe personal results on self-sacrific or occup achievemen 2) same as		The importance of work and a career in one's total life	1) Degree to wha person is ide tified psychole ically with his wo degree to whi work performat affects self-estee 2) CLI measur whether a respectent is job oriented, neutral	person (a strong desi main a me che the organ (b) is willing ert high lew fort for the zation, (c) ed, and accepts) has a per re to re- mber of mai ization, the g to ex- els of ef- eorgani- believes in t the val- ds of the	ent to which a son (a) has a ng desire to rena member of union, (b) is will-to exert high ls of effort for union, (c) belief he objectives of anized labor
	\boldsymbol{B}	M+G		L&K	CLI		
Epistemic correlation: Comparative	Fair	Good	See text	Poor	Good	Good	Fair to Good
aspects: a) overlaps with other forms of work commit- ment	yes	yes	yes	yes	yes	little	yes
b) precludes other commit- ments (e.g., fam- ily)	no	no	yes	yes	yes	no	no
Reliability (alpha values)	Pro: .7071	.6780	.7290	.6293	See text	.8293	See text
Relative impact of determinants: Culture/socializa-						2	
tion Personal factors	+ + + + +	+++	+ + +	+ + +	+ +	: +	0
Situation	Ö	0	+	+ + +	+ + +	+ + +	+ + +
Relative permanence over life course	high	high	high	medium	medium to high	low	low
Means of influence	Cultural/so	ocial change	ization; 2) extended/in-		ment & design; 2) job success;	rites; rites of passage;	of socialization ex- periences; 2) involvement in union organi- zation

Examination of Facets

The theoretical and empirical linkages among the five forms of work commitment are not readily apparent, nor have they been the focus of much comparative study. The inductively formulated facets listed in Table 1 are intended to structure a review that will highlight similarities and differences in work commitment concepts. Each form of commitment is analyzed on the basis of: (a) how the concept's definition and its measure are related to each other, to other forms of work commitment, and to other types of commitment (e.g., family, religious, civic); (b) reliability of the measure(s); (c) the relative impact of culture (socialization), personality, and situational determinants; and (d) assumed permanence over life course and means of influence.

Conceptual Definition and Epistemic Correlation

It is important to initiate this analysis with an examination of the formal, conceptual definition of each commitment concept in conjunction with its operational definition or measure. The linkage between a conceptual definition and a measurement procedure, termed the epistemic correlation (Northrop, 1959), is a critical connection in that researchers have a tendency to assume that isomorphism exists once a concept/measure comes in to popular use and because subsequent theorizing about a concept tends to be derived from the conceptual definition rather than its operationalization. When the epistemic correlation (or construct validity) of a concept is less than perfect, the potential for deficiency (variability in the concept not captured in the measure) or contamination (variability in the measure not reflected in the concept) increases (Schwab, 1980). It is these two areas that most frequently contribute to the formation of redundant concepts. That is, researchers may respond to deficiency by creating a new measure that they feel totally captures the essence of the concept and to contamination by devising a narrower measure intended to reflect the concept more precisely.

Protestant Work Ethic. Protestant work ethic endorsement is defined similarly by Blood (1969) and Mirels and Garrett (1971). The essence of this concept (only the measures differ) is the belief that hard work is intrinsically good and an end in itself. Personal worth and one's moral stature are to be gauged on willingness to work hard. One's job, career, or-

ganization, or union is merely a backdrop in which to exert high levels of effort.

Some scholars—for example, Bhagat (1979)—have proposed conceptual dimensions or themes to be subsumed within work ethic endorsement, themes that overlap with other forms of work commitment but that have not received much theoretical attention or empirical confirmation. Factor analytic examination of the Blood (1969) measure has suggested that two dimensions exist, a pro-Protestant ethic and a non-Protestant ethic. Although these two dimensions essentially reflect a reverse wording of statements, findings associated with each subscale have been sufficiently different to warrant their continued separation (Aldag & Brief, 1975). Most items seem to correspond to the conceptual definition, but the non-Protestant measure contains one item that appears to overlap with the career salience and/or job involvement forms of work commitment (i.e., "The principal purpose of a man's job is to provide him with the means for enjoying his free time"). Similarly, 1 item of the 19-item Mirels and Garrett (1971) measure (i.e., "There are few satisfactions equal to the realization that one has done his best at a job") could be said to be redundant with work as a central life interest. Contrary to Kidron (1978), this overlap is not held to be problematic. The central life interest measure is also a lengthy instrument (32 to 40 items). Operationalization of the Protestant work ethic does not seem to infringe on the other types of commit-

Career Salience. Career salience is defined by Greenhaus (1971) as the importance of work and a career in one's total life. It is measured by a 27/28item set of questions that has been used as a unidimensional measure (Greenhaus & Sklarew, 1981) and factor analyzed into three subscales (Greenhaus, 1971): (1) general attitude toward work (containing value and job focus items—for example, "work is one of those necessary evils"; "it is difficult to find satisfaction in life unless you enjoy your job"; (2) vocational planning and thought—for example, "I enjoy thinking about and making plans about my future career"; and (3) the relative importance of work—containing items that require the respondent to express preferences between work and nonwork activities, for example, "I intend to pursue the job of my choice, even if it allows only very little opportunity to enjoy my friends." The latter subscale is similar to the job focus concept, work as a central

life interest. In addition, there is a 6-item version of the measure that utilizes 2 items from each subscale. Implicit in the notion of career salience (i.e., the second subscale) is the idea that one's vocation has a temporal progression (stages) or requires an extensive time period to achieve proficiency. It is difficult to evaluate the level of isomorphism between the career salience definition and measure because of the ambiguity of "importance of work" in the definition. Redefining the concept to reflect the three subscales identified might be appropriate.

It is apparent from discussion of the subscales that career salience taps some aspects of work commitment that are redundant with work ethic endorsement, job involvement, and central life interest. The measure purports to hold attitudes toward a specific organization or union as inconsequential to one's career loyalty. However, it should be noted that alternate career commitment concepts (e.g., professionalism) often presuppose an antithetical relationship between career loyalty and organizational commitment. Six of the Greenhaus career salience items force the respondent to choose between career and family, leisure pursuits, friends, or religious activities. Hence, high career salience necessarily precludes high commitments to these other areas. Its utility should not be underestimated, however, as it is one of the few commitment concepts that attempts to capture the notion of devotion to a craft, occupation, or profession apart from any specific work environment, over an extended period of time.

Job Involvement. The most well known and frequently utilized measure of job involvement is that devised by Lodahl and Kejner (1965). The original article contains two definitions of the concept: one described involvement in terms of a job performanceself-esteem relationship; the other emphasized involvement as a component of self-image (i.e., personal identification with work). The former definition partially overlaps with the Protestant work ethic form of work commitment by suggesting that one's worth is a function of how well one performs one's job. The measures emanating from Lodahl and Kejner's definitions, however, were not deductively formulated in order to operationalize either conceptual notion. Instead, they were arrived at inductively through factor analytic procedures designed to reduce potential job involvement statements into two standardized attitude scales (a 20-item version and a 6-item version). Hence, the Lodahl and Keiner measures were not devised with any a priori definitions or theoretical frameworks in mind, and each contains items reflecting the two definitions provided. A better measure is the 4-item subset popularized by Lawler and Hall (1970): (1) "The most important things that happen to me involve my work;" (2) "I live, eat, and breathe by job;" (3) I am very much involved personally in my work;" and (4) "The major satisfaction in my life comes from my job." These items focus on the degree of daily absorption an individual experiences in work activity and are closely aligned with the psychological identification definition of work offered by Lodahl and Keiner. The Lawler and Hall (1970) subscale, despite its brevity, is not altogether independent of the other forms of work commitment. It directly overlaps with the first career salience subscale (e.g., the suggestion that life and job satisfaction go hand in hand) and at least latently covaries with both work as a central life interest and the third career salience subscale that contrasts commitment spheres. The phrases, "the most important" and "the major satisfaction," imply an unspecified comparative present in the latter two forms of work commitment. These phrases also imply that high job involvement would preclude high levels of commitment to other life sectors.

Central Life Interest (CLI). Work as a central life interest is a concept that refers to an individual's preferred locale for carrying out activities. It is measured by asking respondents to choose among work and nonwork settings for engaging in an activity that is as likely to take place in one setting as another—for example, I would most hate (a) "missing a day's work," (b) "missing a meeting or an organization I belong to," or (c) "missing almost anything I usually do." Respondents then are labeled as job oriented, nonjob oriented, or neutral. This operationalization is well suited to the formal definition and to the job focus classification. A number of versions of the scale exist, ranging from 6 to 40 items, with a 32-item version the most popularly used.

The measure used to operationalize CLI precludes being committed to one's club, church group, or family and one's job, but it generally does not preclude high levels of devotion to work values, one's organization, or union. There is a small amount of overlap between career salience (relative importance of work subscale) and CLI in terms of preferring career/job activities to family activities and some

potential overlap with one of Blood's (1969) Protestant work ethic items and job involvement.

Organizational Commitment. Organizational commitment is viewed as a multidimensional concept embracing an employee's desire to remain in an organization, willingness to exert effort on its behalf, and belief in and acceptance of the values and goals of the organization (Mowday et al., 1979). Alternate concepts in this domain are referenced as organizational involvement and organizational identification. The most widely used measures of organizational commitment are a 15-item questionnaire that yields an overall commitment score and a 9-item subset of the same instrument (Mowday et al., 1979). This measure demonstrates an exceptionally strong relationship to its conceptual definition.

Kidron (1978) and Gould (1979) report that two of the three dimensions of organizational commitment correspond to Etzioni's (1961) notion of calculative (desire to remain) and moral (internalization of values and goals) involvement. Factor analytic examinations of the Mowday et al. commitment measure support this interpretation (Angle & Perry, 1981). Moreover, Gould suggests that moral involvement subsumes job involvement. Hence, the potential for conceptual overlap between organizational commitment and value and job focus forms of work commitment is considerable. However, with one exception (i.e., "I would accept almost any type of job assignment in order to keep working for this organization"), the items that compromise the Mowday et al. measure maintain an organizational focus and do not appear to overlap empirically with any of the other work commitment measures. In addition, they do not preclude allegiance to other life sectors.

Union Commitment. One of the newest forms of work commitment to be recognized is union commitment. In some ways this concept is similar to attitude towards union concepts and measures. These measures typically have emphasized opinions about unionism rather than loyalty to and feeling towards a specific union. Hence, union commitment is viewed as a broader concept embracing more than attitude toward organized labor. It is relevant, however, only to union members.

A number of scholars have proposed that commitment to a union is analogous to organizational commitment, representing primarily a shift in institutions, and therefore should incorporate the three dimensions noted in the previous discussion of organiza-

tional commitment (Gordon et al., 1980). However, it should be noted that employing organizations and unions do differ on a number of points that are likely to be related to commitment. One crucial difference is that organizational membership is nearly always voluntary, whereas union membership sometimes is a condition of employment. Keeping this reservation in mind, union commitment is defined as a union member's willingness to remain a member of the union, belief in the objectives of organized labor, and willingness to perform services voluntarily for the union (Gordon et al., 1980). This definition was inductively formulated in a study of white collar, nonprofessional employees that yielded 4 empirical dimensions (30 items): union lovalty, responsibility to the union, willingness to work for the union, and belief in unionism (Gordon et al., 1980). The level of concept/measure isomorphism is judged to be fair to good.

This union commitment measure is relatively independent of all but the job focus form of work commitment and does not preclude commitment to other life areas. The three items that comprise the belief in unionism factor (e.g., "My loyalty is to my work, not to the union") overlap with the job focus form of work commitment. It is important to note that union commitment does not adopt an adversary stance relative to organizational commitment. Several items, however, do pertain to the union member's willingness to uphold the terms of the union-management contract.

Summary. As indicated in Table 1, evaluations of epistemic correlations ranged from poor (Lodahl & Kejner, 1965) to good (Mirels & Garrett, 1971; CLI; organizational commitment). In the case of career salience, a reformulation of the definition was suggested. Operationally, all of the measures revealed some problems with construct contamination relative to other work commitment concepts, with organizational commitment demonstrating the least degree of overlap. The extent to which work commitment measures precluded high commitment to other life sectors was found to be problematic in three instances—career salience; Lodahl and Keiner (1965); CLI. Hence, the examination of this first set of facets suggests that work commitment is indeed marked by at least some redundancy.

Reliability of Measures

The reliability of a measure can be viewed as an alternate indicator of concept/measure isomorphism

in the sense that all the items in a unidimensional scale or subscale should measure the same thing. Variance in a measure that does not reflect the underlying concept may be a reflection of construct deficiency or, more likely, contamination. Furthermore, confidence in a measure is enhanced as the number of samples is which it demonstrates reliability increases. These observations serve as the basis for the well known dictate that reliability is a prerequisite for validity (Schwab, 1980).

Protestant Work Ethic. The reliability of the Blood work ethic measure is somewhat difficult to evaluate in view of relatively few researchers who have reported psychometric data on the measure. Its use, however, far exceeds the number of reliability estimates available (Saal, 1978). Two reliability estimates for the pro-Protestant measure were located. Wanous (1974) reported a Spearman-Brown estimate of .70 among telephone operators, and Waters, Batlis, and Waters (1975) reported a Cronbach alpha value of .71 derived from a sample of college students. Lack of information regarding the non-Protestant subscale suggests that this measure may not reach acceptable levels of reliability.

The Mirels and Garrett measure of work ethic endorsement has generated stronger evidence of reliability. Five reliability assessments were identified and yielded Spearman-Brown values ranging from .67 to .80 (Kidron, 1978) and alpha values around .80 (Waters et al., 1975).

Career Salience. Empirically, career salience has been treated as a unidimensional concept with at least seven available estimates of internal consistency reliability. Cronbach alpha estimates for the 27/28 item version range from .74 (Greenhaus & Sklarew, 1981) to .90 (Beutell & Greenhaus, 1982). The 6-item version values range from .72 (Greenhaus & Kopelman, 1981) to .83 (Greenhaus & Simon, 1977).

Job Involvement. The reliability of the Lodahl and Kejner (1965) measures of job involvement have been evaluated and reported in over 14 studies using parallel forms, test-retest, and internal consistency indices. These assessments reveal reliability estimates ranging from .62 (Jones, James, & Bruni, 1975) to .93 (Hollon & Chesser, 1976). The Lawler and Hall (1970) subscale has demonstrated Cronbach alpha values of .75 (Rabinowitz, Hall, & Goodale, 1977) and .77 (Schmitt, White, Coyle, & Rauschenberger, 1979).

Work as a Central Life Interest. The evaluation

of the reliability of the CLI instrument has been hampered by the presence of multiple scale versions and by controversy over whether response data should be regarded as nominal or ordinal (Maurer, Vredenburgh, & Smith, 1981). In a comparative study involving four samples, Maurer et al. (1981) report that the 40-item CLI scale does not provide strong evidence of internal consistency using item analysis and split-half procedures.

Organizational Commitment. The reliability evidence associated with organizational commitment is quite extensive. Estimates of coefficient alpha range from .82 to .93, with a median of .90 across eight samples (Mowday et al., 1979). Results of item and factor analyses in the same study further confirm the internal consistency of this measure. Lastly, two examinations of test-retest reliability indicate that organizational commitment is relatively stable (Mowday et al., 1979).

Union Commitment. The recent development of the union commitment measure precludes any definitive statement concerning the reliability of the instrument.

Summary. The reliability evidence presented in conjunction with the Protestent work ethic suggests that the Mirels and Garrett measure is preferable to the Blood subscales. No evidence of reliability was found for the non-Protestant ethic subscale, and thus its use is not recommended. The career salience instrument demonstrated adequate evidence of reliability as a unidimensional scale. It is noted, however, that no data were located on the reliability of the three subscales identified through factor analysis by Greenhaus in 1971. Information on the reliability of these subscales would be useful, as some (e.g., vocational planning) are less redundant with the alternate work commitment concepts. The Lodahl and Kejner as well as the Lawler and Hall versions of job involvement meet generally recognized reliability criteria. At present, the reliability of the CLI measure seems in doubt, and the measure cannot be recommended. Rather than dismiss it entirely, however, its history of usage warrants additional inquiry into its limitations. The organizational commitment measure provides the strongest reliability data; from a reliability perspective, it can be strongly recommended. Finally, although holding promise, the union commitment measure needs additional psychometric investigation prior to any endorsement. It is particularly necessary in this instance because factor analysis results tend to be sample specific (Schwab, 1980).

Determinants

Underlying each form of work commitment are latent assumptions concerning how variation in the concept evolves. Emphasis may be placed on cultural or socialization practices (e.g., Western vs. Eastern cultures, family child rearing practices, childhood religiosity), personal factors of personality and individual difference (e.g., locus of control, age), or the situation. The latter explanation embraces a multiple of perceptual and objective assessments of the work environment and adult socialization. It is possible, of course, to argue that each of these "prime movers" plays a partial or interactive role in explaining variation in work commitment, but there appears to be some consensus that relative contributions differ.

Protestant Work Ethic. In the case of Protestant work ethic endorsement, determinants are felt to be primarily a function of personality and secondarily a reflection of culture. The personality link is based on observations that ethic endorsement covaries with other stable personality traits (e.g., higher order need strength—Brief & Aldag, 1977; Wanous, 1974; locus of control-McDonald, 1972; Waters et al., 1975; authoritarianism—Greenberg, 1977; MacDonald, 1972); and demographic traits (e.g., age-Aldag & Brief, 1977; race—Bhagat, 1979). Moreover, work ethic measures have been found to be important moderators between such situational factors as job characteristics and work reactions (Greenberg, 1977; Wanous, 1974). The secondary impact of culture and socialization is derived from studies that have noted more acceptance of Protestant ethic ideals among rural workers and Protestants (Hulin & Blood, 1968; Turner & Lawrence, 1965) and the existence of crosscultural differences in levels of work ethic endorsement (Philbrick, 1976). No studies were located that seek to assess the impact of situational variables on work ethic endorsement. Indeed, the empirical research has adopted a selection and placement approach to this form of work commitment and typically has consisted of a comparison between high and low work ethic endorsers in relation to some work outcome (e.g., repetitive task performance, Merrens & Garrett, 1975; performance under varying schedules of reinforcement, Pritchard, Leonard, Von Berger, & Kirk, 1976).

Career Salience. The determinants of career

salience are difficult to pinpoint. Empirical studies involving career salience typically have conceptualized it as an independent variable impacting on other variables. Beyond evidence suggesting that persons with high career salience engage in more job searching behavior (Greenhaus & Sklarew, 1981), value jobs with intrinsic rewards (Greenhaus & Simon, 1977), experience more work-family conflict (Greenhaus & Kopelman, 1981), and, if female and professional, contribute to their husbands' marital adjustment (Hardesty & Betz, 1980), relatively little is known. However, borrowing from other research on careerism, it generally is recognized that men have a cultural mandate to give priority to their occupations. Women are not as strongly propelled toward fulltime, life span careers (Montagna, 1977). Differences between male and female labor force participation rates bear this out. In addition, other studies on career commitment—for example, White (1967) have shown that commitment is greater among females whose mothers have worked outside the home than among females whose mothers have not experienced external employment. Hence, the impact of culture and sex role socialization on career salience cannot readily be denied. The influence of personality on career salience probably interacts with culture and socialization effects. Career salience is associated with individual differences in vocational preferences and behaviors (Greenhaus, 1971; Greenhaus & Simon, 1977), but a psychological profile of individuals with high or low career salience has not been developed. The impact of situational factors on career salience has received little attention except for tangential studies on localism versus cosmopolitism. One recent study does suggest that situational factors such as the organizational context may have an impact on career commitment (Tuma & Grimes, 1981). In the absence of additional investigations, however, career salience is evaluated as minimally susceptible to situational factors.

Job Involvement. The origin of job involvement has been directly addressed by a number of researchers—for example, Rabinowitz and Hall (1977). The consensus appears to be that job involvement is a function of personality/individual difference (i.e., it is related to age, locus of control, higher order need strength, protestant ethic endorsement) and the work situation (i.e., participation in decision making, job stimulation). The impact of culture and socialization is held to be minimal. Only community size has been

identified as a replicable correlate, and job involvement findings similar to those yielded from American workers have been duplicated cross-culturally (Reitz & Jewell, 1979; Sekaran & Mowday, 1981).

Central Life Interest. An extensive amount of research has been completed using the CLI. Consistent differences in CLI have been observed across occupational groupings, suggesting that the work environment or situation has an impact on CLI (Dubin, Hedley, Taveggia, 1976). White collar workers have been noted to report higher CLI than blue collar workers. CLI also has been shown to covary with personality traits (decisiveness, needs for selfactualization, job security, and achievement; Dubin & Champoux, 1975), legitimizing the notion that personality influences CLI. More impact is attributed to the situation than personality, however. The CLI measure allows for more situational variability emanating from nonwork sectors. The influence of culture and socialization practices has not been widely studied, though there is some evidence that cultural differences (Japanese, British, and American) affect CLI in work (Dubin, Champoux, & Porter, 1975).

Organizational Commitment. Studies designed to ascertain the antecedents of organizational commitment indicate that this form of commitment is a function of personal characteristics (e.g., age, tenure, education, and need for achievement; Steers, 1977, and Welsh & LaVan, 1981) and situational factors related to the job setting (e.g., climate, role conflict, role ambiguity, job and organizational characteristics; Morris & Sherman, 1981, and Steers, 1977). The more salient personal factors are those that reflect employees' personal investments in the firm (e.g., preemployment sacrifices to join the organization, pension plans, status and salary levels attributable to seniority). The presence of these "side bets" (Becker, 1960) serves to strengthen organizational loyalty as the costs of changing organizations increase with age and time invested. Situational factors have been observed to explain more variation in organizational commitment than personal factors (Steers, 1977). The role of culture and socialization in determining organizational commitment generally is unknown, despite the conventional wisdom asserting that nations with lower turnover (e.g., Japan) have more organizationally committed workers (Marsh & Mannari, 1977).

Union Commitment. Little research has been completed using the Gordon et al. (1980) measure or

general attitudes towards unions measures. The few existing studies suggest that personal factors play a very limited role in union commitment and that situational factors (e.g., pro-union socialization experiences, past union membership, participation in union activities) play the largest role (Gordon et al., 1980). The impact of culture on union commitment is not well understood, although there has been some suggestion that unions that control membership entry and recruit from a single ethnic or racial group have a more committed rank and file (Dubin et al., 1976). Such a cultural bond, it is reasonable to suppose, might serve as an indirect cause of union commitment.

Summary. The five forms of work commitment demonstrate considerable diversity in terms of their constituent antecedents. The impact of personal factors appears to be independent of the presence of cultural or situational determinants, whereas cultural and situational factors appear to be relative substitutes for one another.

It is reassuring to note that the two work ethic and two job involvement measures were marked by virtually the same combination of determinants. The case for redundancy between commitment foci is less well supported here than in the previous facets. However, this observation should be qualified. Not all of the variables representative of a determinant class were evaluated in relation to each form of commitment.

Assumed Permanence and Means of Influence

The previous section emphasized the mix of factors held to determine each form of work commitment. The last two facets attempt to summarize the prospects of altering levels of work commitment. The stability or permanance of the commitment form is evaluated in terms of high, medium, or low permanence over the life course. The means of influence facet describes possible change strategies. Not surprisingly, there is some covariation between the determinants and means of influence, although the overlap is not as great as one might suppose. Some determinants are not manipulatable (e.g., age), precluding identification as a change tactic, and some strategies reflect more than one class of determinants (e.g., prounion socialization/involvement). In addition, some strategies reflect possible determinants that have not previously received empirical study in connection with commitment and therefore were not likely to be included in the determinants section (e.g., realistic job previews).

Protestant Work Ethic. Studies involving work ethic and cultural, personality, and situational factors noted above have assumed that work ethic is a relatively fixed attribute over the life course. No empirical investigations of attempts to change ethic levels were encountered, although Bhagat (1979) has proposed that culture-assimilator training might improve work ethic endorsement among blacks. Accordingly, the Protestant work ethic is viewed as a value subject to influence only through cultural and social evolution and its latent effects on personality formation. This is consistent with the theoretical underpinnings of work ethic endorsement.

Career Salience. The issue of career salience stability over the life course is one of circular causation. Can exposure to work environments that engender loyalty through professionalization and other socialization techniques generate career salience? Or do persons channel themselves into occupations that require levels of devotion they are willing to express? Some have contended that career salience can be elevated through professionalization and occupational socialization. However, it also should be recognized that these practices typically are found in fields characterized by entry restrictions that include demonstrations of high career salience. Career applicants unable or unwilling to meet these entrance standards may be excluded from career membership (e.g., professionals, skilled trades). Finally, it appears difficult to displace high levels of commitment to other life spheres with career commitment. A study by Davis. Olesen, and Wittaker (1966) found that nearly all nursing school entrants ranked home and family their first priority, with 77 percent ranking work and career second. By graduation, 90 percent still ranked home and family first and the proportion ranking work and career second dropped to 54 percent. Career salience therefore does not appear to be a particularly manipulatable characteristic unless initial salience is high.

Job involvement. Job involvement appears to demonstrate a moderate level of stability. Test-retest reliability over a 20-month period was found to be .70 among research and development workers (Hall & Mansfield, 1975). The impact of job redesign and other job changes on job involvement is equally equivocal (Hall, Goodale, Rabinowitz, & Morgan, 1978). The empirical research seems to report that

job involvement can fluctuate within individuals over time (e.g., age is positively related to job involvement), covaries with some personality traits, and fluctuates among individuals with similar characteristics working in different job settings. However, the manner in which these changes occur is not well understood. Saal (1978) and a number of others contend that one must look to demographic, psychological, and job characteristics to account for job involvement. Means for influencing job involvement therefore are rather speculative. Suggestions for elevating job involvement include job assignment and design that consider individual characteristics, opportunities to achieve job success (Rabinowitz & Hall, 1981), and realistic job previews that allow prospective employees to gauge more accurately whether a job will suit their interests and abilities (Rabinowitz, 1981).

Central Life Interest. CLI appears to share the circular causation dilemma discussed under career salience. The impact of job situation factors is difficult to separate from the influence of personality on vocational choice (i.e., the self-selection bias). Hence, CLI is felt to be reasonably stable over the life course. though perhaps not as invariant as job involvement. The job involvement measure reflects primarily job related feelings, but CLI may be altered through life course changes unrelated to the job (e.g., a divorce might heighten CLI). On the other hand, workers with low CLI may be immune to any job related changes induced to increase involvement simply because the job is not a salient aspect of their lives. Empirical research clearly is needed to resolve the stability issue. Until then, those interested in influencing CLI might try the recommendations suggested for influencing job involvement. The chances for success using these techniques are less than what could be anticipated for job involvement.

Organizational Commitment. Among all but older and long tenured employees, organizational commitment may vary considerably. Of the forms of work commitment studied here, it is most likely to fluctuate over the life course. This variation (in order of their likelihood) may be a function of an organizational membership change, operational changes within one's employing organization, and accrual of personal investments in the firm. Means of influencing organizational commitment include pre- and early employment socialization experiences that culminate in formal membership (Gordon et al., 1980; Salancik, 1977), presence of enriched job characteristics

(e.g., task identity, feedback; Steers, 1977), and existence of desired organizational structure (e.g., decentralization, functional dependence, formalization; Morris & Steers, 1980). Extending the notion of side bets (personal investments in the organization) to rewards that are rendered earlier in an employee's career might also foster organizational commitment (e.g., stock options). In addition, future oriented norms of reciprocity (backed by a legal contract if necessary) might enhance commitment (e.g., additional training in exchange for a specified number of years of future service; Scholl, 1981). It also has been suggested that the calculative dimension of organizational commitment could best be served by maintaining a strong link between job performance and receipt of expected rewards (Gould, 1979). Finally, it should be recognized that decreasing levels of organizational commitment sometimes is desirable (Salancik, 1977). Maintaining a sufficient amount of turnover and avoiding groupthink practices represent situations in which excessive commitment can be dysfunctional.

Union Commitment. Union commitment has the capacity of being quite variable over the life course to the extent that people change employers and accompanying union representation. However, to the extent that union based rewards are tied to seniority, there is "side bets" pressure to remain in the union. Another potential source for individual variability in commitment is the strength of the union and the economic situation confronting the employer and union member. Case studies indicate that union commitment is higher during tense bargaining situations and lower during calm periods (Dubin et al., 1976). The actual level of stability of union commitment is truly an unknown empirical question. The primary means of influence would seem to be prounion socialization experiences (pre- or post-entry) and involvement in union activities (e.g., serving as an officer).

Summary. This analysis of stability and means of influence facets suggests that some forms of work commitment are far more susceptible to change and influence than others. Work ethic endorsement and career salience were found to be relatively immobile; job involvement and CLI were observed to be moderately changeable; and both organizational and union commitment were found to be farily manipulatable. This might be regarded as evidence of only moderate redundancy across forms of work commit-

ment. However, the significance of these differences is reduced when the similarity of the means of influence is noted. There is a preponderance of socialization strategies (which include professionalism, apprenticeship, and initiation rites) and job design ideas.

Not suprisingly, these conclusions about stability and means of influence correspond to the extent to which the situation is thought to determine the level of commitment (i.e., the greater the proportion of variability emanating from situational factors, the greater the prospects for influence). It should be appreciated, however, that just as the factors selected to be examined as determinants of a form of commitment are restricted by perceptual blinders about what the concept entails, the assumptions held about permanence and appropriate strategies for change also may be restricted. Hence, there may be some unique strategies effective in altering each form of work commitment that as yet are untried, but there also is the potential for even more redundancy via common change tactics.

The results of this facet design, as a whole, indicate that the differences among the forms of work commitment studied are not as great as one might assume from their use in the organizational behavior literature. Moreover, it is apparent that some measures for these concepts (Blood's ethic measure, CLI) have not really demonstrated adequate evidence of reliability and therefore should not be used. But is the degree of overlap of sufficient magnitude to invalidate one or more of the concepts? Before offering a final assessment it is appropriate to examine the intercorrelations among the measures (high correlations would be indicative of redundancy).

Empirical Interrelationships

The lack of knowledge about concept redundancy is not a new problem in organizational research. It characterizes other areas (e.g., organizational climate and job satisfaction; leadership) and stems from researchers' lack of fascination with construct validation studies (Schwab, 1980). In the case of work commitment, redundancy would be evidenced by high, positive intercorrelations among the relevant measures. These correlations should be particularly high, say in the .6 to .8 range, because of the common variance attributable to the derivement of all the measures from paper and pencil techniques.

Evidence of independence might be as high as .3 in order to account for the shared method error and the probability of some mutual antecedents. It also is possible that the more permanent forms of work commitment impact on the more variable forms. Six studies that have examined interrelationships among the work commitment measures studied here report the following intercorrelations: (1) Protestant work ethic and job involvement, three of seven examinations nonsignificant ($r_s = .10$ to .60, Aldag & Brief, 1975; Rabinowitz & Hall, 1977; Saal, 1978); (2) career salience (vocational planning and thought subscale) and job involvement ($r_s = .37$ and .40, Wiener & Vardi, 1980); (3) job involvement and organizational commitment ($r_s = .37$, Maurer, 1968); (4) job involvement and organizational commitment $(r_s = .30, .54, .55, .56, Mowday et al., 1979);$ and (5) central life interest and organizational commitment ($r_s = .39$ and .43, Mowday et al., 1979). Because these findings do not reveal exceptionally high or low intercorrelations, the data are inconclusive. Moreover, it should be noted that only 5 of 21 possible combinations were observed. Hence the correlational evidence cannot be used to justify the elimination or retention of any of the commitment concepts. For the present, it seems that reliance must be made on the deductively generated results of the facet design to guide future research.

Improving Work Commitment Research

Some recommendations for advancing understanding of work commitment are offered.

More Rigorous Construct Validation

The need for studies that might validate the conceptual differences argued for in the facet analysis is rather self-evident. All of the measures are marked by some construct contamination (redundancy). Accordingly, research effort directed toward establishing the empirical validity of work commitment measures would be useful. Multitrait-multimethod assessments might improve confidence in these measures. Less rigorous but still exemplary work of this nature has been completed for organizational commitment by Mowday et al. (1979). More behaviorally based measures for work commitment also would be useful in reducing the shared method error variance problem (Wiener & Gechman, 1977). Related to this suggestion is the issue of whether respondents can

discriminate empirically among what researchers see as logically independent conceptualizations (i.e., can respondents evaluate statements about their values, careers, jobs, organizations, and unions without halo effect contamination?). If they cannot, non-selfreport measures may be necessary. At a minimum, an empirical study comparing all five forms of work commitment in a single sample is in order. Finally, within each work focus category in Exhibit 1, there are some unresolved issues concerning how the subsidiary measures are interrelated. In some instances (e.g., organizational commitment, Morris & Sherman, 1981), the presence of discrepant findings associated with different measures is impeding attempts at generalization. Evidence is needed on the convergent and discriminant validity of these measures.

Consideration as a Dependent Variable

All of the forms of work commitment would profit from more empirical examination as dependent variables. Protestant work ethic, for example, is regarded as primarily a personality trait fixed at some level by adulthood. It would be worthwhile to substantiate the invariant nature of this concept by monitoring its level during some organizational development efforts aimed at elevating other forms of work commitment. Analogously, formation of personality profiles of work ethic endorsement and career salience would substantiate arguments regarding their permanance over the life course. Similar attention should be rendered to the less permanent forms of commitment for better validation of their variability.

Conceptual Reevaluation

Lastly, perhaps some thought should be directed toward the elimination of work commitment as a generic concept label. Is work commitment profitably conceived as an overarching construct? Is there some essence or common nucleus of work commitment? This review suggests that the likelihood of devising a single, unidimensional generic concept and measure is small. It is apparent that there are some differences among the five foci of commitment (e.g., feelings about one's job and work in general probably are not interchangable), but the surplus meaning embedded in each concept serves to obscure rather than enhance these potential differences. Moreover, the indiscriminate use of the concepts perpetuates less

disciplined theorizing about commitment and the proliferation of additional, redundant work commitment concepts as researchers seek to capture their own unique mix of work commitment elements (see Exhibit 1). In the author's view, it is more useful to dismantle work commitment and designate (or formulate) concepts representative of each work focus area. The existing redundancy of measures within each work focus category first must be eliminated, followed by the elimination of between-work-foci redundancy. Perhaps then a commitment index analogous to the Job Descriptive Index (Smith, Kendall, & Hulin, 1969) reflecting different foci can be formulated. This recommendation is consistent with the experience of researchers who, in dealing with the similarily complex notion of organizational effectiveness, elected to treat its constitutent dimensions as separate concepts (Kahn, 1977).

Work commitment has consumed an inordinate amount of researchers' attention without a commensurate increase in the understanding of its fundamental nature. Some have erred by regarding these concepts as fundamentally interchangable. Others have assumed more differentiation than can be supported on conceptual or empirical grounds. It is hoped that this analysis of work commitment will sensitize others about the need to direct more effort toward the construct validation process and perhaps stimulate some to engage in the needed research activity. Indeed, to the extent that work commitment is a representative case in the discipline, those who help delineate the utility and limitations of existing concepts should be rewarded as much as are those who formulate new conceptual vehicles.

References

- Aldag, R. J., & Brief, A. P. Some correlates of work values. *Journal of Applied Psychology*, 1975, 60, 757-760.
- Aldag, R. J., & Brief, A. P. Age, work values, and employee reactions. *Industrial Gerontology*, 1977, 4, 192-197.
- Almquist, E., & Angrist, S. Role model influences on college women's career aspirations. *Merrill-Palmer Quarterly*, 1971, 17, 263-279.
- Angle, H. L., & Perry, J. L. An empirical assessment of organizational commitment and organizational effectiveness. Administrative Science Quarterly, 1981, 26, 1-14.
- Becker, H. S. Notes on the concept of commitment. American Journal of Sociology, 1960, 66, 32-40.
- Beehr, T., Walsh, J., & Taber, T. Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology*, 1976, 61, 41-47.
- Beutell, N. J., & Greenhaus, J. H. Inter-role conflict among married women: The influence of husband and wife characteristics on conflict and coping behavior. *Journal of Vocational Behavior*, 1982, 21, 99-110.
- Bhagat, R. S. Black-white ethic differences in identification with the work ethic: Some implications for organizational integration. *Academy of Management Review*, 1979, 4, 381-391.
- Blood, M. R. Work values and job satisfaction. *Journal of Applied Psychology*, 1969, 53, 456-459.
- Brief, A., & Aldag, R. Work values as moderators of perceived leader-behavior-satisfaction relationships. Sociology of Work and Occupations, 1977, 4, 99-112.
- Buchanan, B. Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 1974, 19, 533-546.

- Bucholz, R. An empirical study of contemporary beliefs about work in American society. *Journal of Applied Psychology*, 1978, 63, 219-227.
- Cherrington, D., Condie, S., & England, J. Age and work values. Academy of Management Journal, 1979, 22, 617-623.
- Dalton, M. Men who manage. New York: Wiley, 1959.
- Davis, F., Olesen, V., & Wittaker, E. W. Problems and issues in collegiate nursing education. In F. Davis (Ed.), *The nursing profession*, New York: Wiley, 1966, 138-175.
- Dubin, R. Industrial workers' worlds: A study of the "central life interests" of industrial workers. *Social Problems*, 1956, 3, 131-142.
- Dubin, R., & Champoux, J. Workers' central life interests and personality characteristics. *Journal of Vocational Behavior*, 1975, 6, 165-174.
- Dubin, R., Champoux, J. E., & Porter, L. W. Central life interests and organizational commitment of blue-collar and clerical workers. Administrative Science Quarterly, 1975, 20, 411-421.
- Dubin, R., Hedley, R. A., & Taveggia, C. Attachment to work. In R. Dubin (Ed.), Handbook of work, organization, and society. Chicago: Rand McNally, 1976, 281-341.
- Eden, D. & Jacobson, D. Propensity to retire among older executives. *Journal of Vocational Behavior*, 1976, 8, 145-154.
- Etzioni, A. A comparative analysis of complex organizations. New York: Free Press, 1961.
- Faunce, W. Occupational involvement and the selective testing of self-esteem. Paper presented at the Meeting of the American Sociology Association, Chicago, 1959.
- Gannon, M. J., & Hendrickson, D. H. Career orientation and job satisfaction among working wives. *Journal of Applied Psychology*, 1973, 57, 339-340.

- Gordon, M. E., Philpot, J. W., Burt, R. E., Thompson, C. A., & Spiller, W. E. Commitment to the union: Development of a measure and an examination of its correlates. *Journal of Applied Psychology*, 1980, 65, 479-499.
- Gould, S. An equity-exchange model of organizational involvement. Academy of Management Review, 1979, 4, 53-62.
- Green, C. M. *Job involvement scale*. Unpublished manuscript, Ohio State University, 1967.
- Greenberg, J. The Protestant-work ethic and reactions to negative performance evaluations on a laboratory test. *Journal of Applied Psychology*, 1977, 62, 682-690.
- Greenhaus, J. H. An investigation of the role of career salience in vocational behavior. *Journal of Vocational Behavior*, 1971, 1, 209-216.
- Greenhaus, J. H. A factorial investigation of career salience. Journal of Vocational Behavior, 1973, 3, 95-98.
- Greenhaus, J. H., & Kopelman, R. E. Conflict between work and nonwork roles: Implications for the career planning process. *Human Resource Planning*, 1981, 4, 10.
- Greenhaus, J. H., & Simon, W. E. Career salience, work values, and vocational indecision. *Journal of Vocational Behavior*, 1977, 10, 104-110.
- Greenhaus, J. H., & Sklarew, N. D. Some sources and consequences of career exploration. *Journal of Vocational Behavior*, 1981, 18, 1-12.
- Guttman, L. An outline of some new methodology in social research. *Public Opinion Quarterly*, 1954, 18, 395-404.
- Hall, D. T., & Mansfield, R. Relationships of age and seniority with career variables of engineers and scientists. *Journal of Ap*plied Psychology, 1975, 60, 201-210.
- Hall, D. T., Goodale, J. S., Rabinowitz, S., & Morgan, M. A. Effects of topdown departmental and job change upon perceived employee behavior and attitudes: A natural field experiment. *Journal of Applied Psychology*, 1978, 63, 62-72.
- Hall, D. T., Schneider, B., & Nygfren, H. T. Personal factors in organizational identification. Administrative Science Quarterly, 1970, 15, 176-190.
- Hardesty, S. A., & Betz, S. A. The relationships of career salience, attitudes toward women, and demographic and family characteristics to marital adjustment in dual-career couples. *Journal of Vocational Behavior*, 1980, 17, 242-250.
- Hollon, C. J., & Chesser, R. J. The relationship of personal influence dissonance to job tension, satisfaction and involvement. *Academy of Management Journal*, 1976, 19, 308-314.
- Hrebiniak, L. G., & Alutto, J. A. Personal and role-related factors in the development of organizational commitments. Administrative Science Quarterly, 1972, 18, 555-573.
- Hulin, C. L., & Blood, M. R. Job enlargement, individual differences and worker responses. *Psychological Bulletin*, 1968, 69, 41-55.
- Jones, A. P., James, L. R., & Bruni, J. R. Perceived leadership behavior and employee confidence in the leader as moderated by job involvement. *Journal of Applied Psychology*, 1975, 60, 146-149.

- Kahn, R. L., Organizational effectiveness: An overview. In P. S. Goodman & J. M. Pennings (Eds.), New perspectives on organizational effectiveness. San Francisco: Jossey-Bass, 1977, 235-248
- Kaplan, H. R., & Tausky, C. Humanism in organizations: A critical appraisal. *Public Administration Review*, 1977, 37, 171-180.
- Kidron, A. Work values and organizational commitment. Academy of Management Journal, 1978, 21, 239-247.
- Koch, J. L., & Steers, R. M. Job attachment, satisfaction, and turnover among public sector employees. *Journal of Vocational Behavior*, 1978, 12, 119-128.
- Lawler, E. E., & Hall, D. T. Relationships of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology*, 1970, 54, 305-312.
- Lodahl, T. M., & Kejner, M. The definition and measurement of job involvement. *Journal of Applied Psychology*, 1965, 49, 24-33.
- MacDonald, A. More on the Protestant ethic. Journal of Consulting and Clinical Psychology, 1972, 39, 116-122.
- Marsh, R. M., & Mannari, H. Organizational commitment and turnover: A prediction study. Administrative Science Quarterly, 1977, 22, 57-75.
- Maurer, J. Work as a "central life interest" of industrial supervisors. Academy of Management Journal, 1968, 11, 329-339.
- Maurer, J. G., Vredenburgh, D. J., & Smith, R. L. An examination of the central life interest scale. Academy of Management Journal, 1981, 24, 174-182.
- Merrens, M., & Garrett, J. The Protestant ethic scale as a predictor of repetitive work performance. *Journal of Applied Psychology*, 1975, 60, 125-127.
- Miller, G. A. Professionals in bureaucracy: Alienation among industrial scientists and engineers. American Sociological Review, 1967, 32, 755-768.
- Mirels, H. L., & Garrett, J. B. The Protestant work ethic as a personality variable. *Journal of Consulting and Clinical Psychology*, 1971, 36, 40-44.
- Montagna, P. D. Occupations and society. New York: Wiley, 1977.
- Morris, J. H., & Sherman, J. D. Generalizability of an organizational commitment model. Academy of Management Journal, 1981, 24, 512-526.
- Morris, J. H., & Steers, R. M. Structural influences on organizational commitment. *Journal of Vocational Behavior*, 1980, 17, 50-57.
- Mowday, R. T., Steers, R. M., & Porter, L. W. The measurement of organizational commitment. *Journal of Vocational Behavior*, 1979, 14, 224-247.
- Northrop, F. S. C. The logic of modern physics. New York: Macmillan, 1959.
- Patchen, M. Participation, achievement, and involvement on the job. Englewood Cliffs, N. J.: Prentice-Hall, 1970.

- Payne, R. L., Fineman, S., & Wall, T. D. Organizational climate and job satisfaction: A conceptual synthesis. Organizational Behavior and Human Performance, 1976, 16, 45-62.
- Philbrick, J. L. The Protestant ethic in East Africa. *Psychologia Africana*, 1976, 16, 173-175.
- Pritchard, R. D., Leonard, D. W., Von Berger, C. W., & Kirk, R. Y. The effects of varying schedules of reinforcement on human task performance. *Organizational Behavior and Human Performance*, 1976, 16, 205-230.
- Quadagno, J. S. Career continuity and retirement plans of men and women physicians. *Sociology of Work and Occupations*, 1978, 5, 55-74.
- Rabinowitz, S. Towards a developmental model of job involvement. *International Review of Applied Psychology*, 1981, 30, 31-50.
- Rabinowitz, S., & Hall, D. T. Organizational research on job involvement. *Psychological Bulletin*, 1977, 84, 265-288.
- Rabinowitz, S., & Hall, D. T. Changing correlates of job involvement in three career stages. *Journal of Vocational Behavior*, 1981, 18, 138-144.
- Rabinowitz, S., Hall, D. T., & Goodale, J. G. Job scope and individual differences as predictors of job involvement: Independent or interactive? Academy of Management Journal, 1977, 20, 273-281.
- Reitz, H. J., & Jewell, L. N. Sex, locus of control, and job involvement; A six-country investigation. Academy of Management Journal, 1979, 22, 72-80.
- Saal, F. E. Job involvement: A multivariate approach. *Journal* of Applied Psychology, 1978, 63, 53-61.
- Salancik, G. R. Commitment and the control of organizational behavior and belief. In B. M. Staw & G. R. Salancik (Eds.), New directions in organizational behavior. Chicago: St. Clair Press, 1977, 1-54.
- Schmitt, N., White, J. K., Coyle, B. W., & Rauschenberger, J. Retirement and life satisfaction. Academy of Management Journal, 1979, 22, 282-291.
- Scholl, R. W. Differentiating organizational commitment from expectancy as a motivating force. *Academy of Management Review*, 1981, 4, 589-599.
- Schwab, D. P. Construct validity in organizational behavior. In B. M. Staw & L. L. Cummings (Eds.), Research in organizational behavior (Vol. 2). Greenwich, Conn.: JAI Press, 1980, 3-43
- Sekaran, U., & Mowday, R. T. Job involvement: A cross cultural analysis of the impact of individual and job factors on job involvement. *International Review of Applied Psychology*, 1981, 30, 51-64.
- Shapira, Z., & Zevulun, E. On the use of facet analysis in organizational behavior research: Some conceptual considerations and an example. Organizational Behavior and Human Performance, 1979, 23, 411-428.

- Sheldon, M. E. Investments and involvements as mechanisms producing commitment to the organization. Administrative Science Ouarterly, 1971, 16, 143-150.
- Slater, C. W. Some factors associated with internalization of motivation towards occupational role performance. Unpublished doctoral dissertation, University of Michigan, 1959.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. The measurement of satisfaction in work and retirement: A strategy for the study of attitudes. Chicago: Rand McNally, 1969.
- Steers, R. Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 1977, 22, 46-56.
- Stevens, J. M., Beyer, J. M., & Trice, H. M. Assessing personal, role, and organizational predictors of managerial commitment. Academy of Management Journal, 1978, 21, 380-396.
- Tuma, N. B., & Grimes, A. J. A comparison of models of professionals in a research-oriented university. Administrative Science Quarterly, 1981, 26, 187-206.
- Turner, A. N., & Lawrence, P. R. *Industrial jobs and the worker*.

 Boston: Harvard University Press, 1965.
- Vroom, V. Ego-involvement, job satisfaction, and job performance. Personnel Psychology, 1962, 15, 159-177.
- Wanous, J. Individual differences and reactions to job characteristics. *Journal of Applied Psychology*, 1974, 59, 616-622.
- Waters, L. K., Batlis, N., & Waters, C. W. Protestant ethic attitudes among college students. Educational and Psychological Measurement, 1975, 35, 447-450.
- Welsh, H. P., & LaVan, H. Inter-relationships between organizational commitment and job characteristics, job satisfaction, professional behavior, and organizational climate. *Human Rela*tions. 1981, 12, 1079-1089.
- White, K. Social background variables related to career commitment of women teachers. *The Personnel and Guidance Journal*, 1967, 45, 648-652.
- White, S. E., & Mitchell, T. R. Organizational development: A review of research content and research design. Academy of Management Review, 1976, 1 (2), 57-73.
- Wiener, Y., & Gechman, A. S. Commitment: A behavior approach to job involvement. *Journal of Vocational Behavior*, 1977, 10, 47-62.
- Wiener, Y., & Vardi, Y. Relationships between job, organization, and career commitments and work outcomes—An integrative approach. *Organizational Behavior and Human Performance*, 1980, 26, 81-96.
- Wollack, S., Goodale, J. G., Witjing, J. P., & Smith, P. C. Development of the survey of work values. *Journal of Applied Psychology*, 1971, 55, 331-338.

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