

# DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE DIRECTORATE OF RESEARCH



The Use of Equal Opportunity Climate in  
Intercultural Training

by

Dan Landis, PhD  
University of Mississippi  
Summer Faculty Research Fellow

Mickey R. Dansby, PhD  
Director of Research  
Defense Equal Opportunity Management Institute

and

Major Rick S. Tallarigo, PhD  
Chief, Organizational Research Division  
Defense Equal Opportunity Management Institute

June 1995



REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE June 1995	3. REPORT TYPE AND DATES COVERED Final - June 1995		
4. TITLE AND SUBTITLE  The Use of Equal Opportunity Climate in Intercultural Training			5. FUNDING NUMBERS	
6. AUTHOR(S)  Dan Landis, Mickey Dansby, Rick Tallarigo				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Directorate of Research Defense Equal Opportunity Management Institute 740 O'Malley Road Patrick Air Force Base, Florida 32925-3399			8. PERFORMING ORGANIZATION REPORT NUMBER  RSP 95-5	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT  Approved for public release; distribution unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words)  This report covers the theory findings, and application of the equal opportunity climate construct. Theoretical constructs underlying the measurement strategy are reviewed, followed by a compendium of research studies reviewing findings from military and academic settings, both in the United States and abroad. The report concludes with a description of how the construct is used as an organizational development tool in the U.S. military setting.				
14. SUBJECT TERMS Equal Opportunity, Equal Opportunity Climate, Intercultural Relations, Intercultural Training, Diversity			15. NUMBER OF PAGES 32	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	



# The Use of Equal Opportunity Climate in Intercultural Training

## Abstract

This report covers the theory, findings, and application of the equal opportunity climate construct. Theoretical constructs underlying the measurement strategy are reviewed, followed by a compendium of research studies reviewing findings from military and academic settings, both in the United States and abroad. The report concludes with a description of how the construct is used as an organizational development tool in the U.S. military setting.

Dan Landis, PhD  
University of Mississippi  
Summer Faculty Research Fellow

Mickey R. Dansby, PhD  
Director of Research  
Defense Equal Opportunity Management Institute

and

Major Rick S. Tallarigo, PhD  
Chief, Organizational Research Division  
Defense Equal Opportunity Management Institute

June 1995

The opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military services, or the Department of Defense.



# The Use of Equal Opportunity Climate in Intercultural Training<sup>1</sup>

Dan Landis, Mickey R. Dansby and Rick S. Tallarigo

## Report aims

This report covers three domains relating to the general topic of equal opportunity (or diversity) climate, (EOC) in organizations. The model is the large organization with a well defined and understood bureaucratic structure. This model reflects the fact that the study of EOC grew out of concerns within the United States military and the further fact that reliable and valid measurement requires a certain minimum of respondents in each unit hence a large organization.

In the sections that follow, we will first give a brief overview of the climate construct (or metaphor) as a perceptual measure and place the study of EOC within that context. The second major section describes a particular approach to the assessment of EOC, the Equal Opportunity Climate Survey (EOCS) and its various incarnations. Finally, we shall describe how the EOCS is used in changing an organization to one that values and supports differences that contribute to the unit's objectives.

## Background

Organizational science is moving at a quickening pace to address the imperatives of workforce diversity. The combined effects of public events (such as the Tailhook incident, the Thomas-Hill hearings [e.g., Mayer&Abramson, 1994], and charges of sexual harassment against public figures) and public law (such as the Civil Rights Act of 1991 and the Americans with Disabilities Act of 1990) have spurred increased recognition of the importance of understanding and managing organizational climates. As with Total Quality Programs, diversity programs are affecting multiple areas of the organization--from recruiting and selection, to promotions, compensation, and strategic planning. What tools are available for studying organizational climates in organizations? What relevance is there for understanding workforce diversity from the standpoint of perceptual assessments of the organizational social climate? This section attempts to describe in general terms the role of perceptual measures in organizational development. Specifically, it is argued that perceptual climate measures have an important role in managing workforce diversity. For the purposes of this discussion, it is assumed that perceptions of organizational climate include social perceptions (i.e., inferences drawn about others on the basis of expressive characteristics. Bruner & Tagiuri, 1954) as well as perceptions of organizational characteristics.

---

<sup>1</sup> This report was prepared when the first author was on sabbatical at the Directorate of Research, Defense Equal Opportunity Management Institute, Patrick AFB, FL. The opinions in this chapter are those of the authors and do not necessarily represent those of the U.S. Government, the Department of Defense or their agencies. Requests for reprints or comments can be addressed to the first author at: Center for Applied Research and Evaluation, University of Mississippi, University, MS 38677.

## **Origins of perceptual measures of the work environment**

The force-field theory of Kurt Lewin is often cited as the origin of the measurement of organizational climate. Lewin considered organizational climate instrumental among the forces shaping individual values, motivation, and behavior (Lewin, 1951). Before Lewin, however, were the Western Electric "Hawthorne" studies. Originally designed as industrial engineering studies of the effects of illumination and other manipulations of the work environment, the series of studies, begun in 1924, resulted in no less than a paradigmatic shift in how we view organizational behavior. No longer was a direct relationship presumed between environment and individual behavior. Rather, individual workers were postulated to react differently to identical environments as a result of attitudes, motives, and perceptions regarding co-workers, job, or organization (Sonnenfeld, 1982). Unable initially to make sense of the experimental data, the Hawthorne experimenters induced the importance of perceptions. As reported by Locke (1976), the Hawthorne researchers "discovered...that workers have minds and that the appraisals they make of the work situation affect their reaction to it." (p. 1299).

In the 1930s, Lewin incorporated individual appraisals, or perceptions, into the formal study of social climates and dynamics in the small group. As a refugee from Nazism, and as an experienced Gestaltist, he posited in the group environment those forces he experienced personally. He pioneered the study of leadership climate. What is more important for the present purposes, Lewin's ideas of social justice and equity were very much part of his formulations of the organizational climate (Lewin, 1948). Since then, the use of perceptual measures in organizational studies has been commonplace.

## **Use of perceptual measures in organizational studies**

Aside from their use in assessing organizational climate, workers' perceptions serve as raw data for several important organizational processes. For example, job redesign is typically predicated upon workers' perceptions of job characteristics such as skill variety, job autonomy, task identity, intrinsic feedback, and task significance (Hackman & Oldham, 1976). An assumption of the job characteristics model is that a worker responds to the job as he or she perceives it. The motivational value of a job is predictable from the job characteristics perceived by its incumbents. This is true despite the arguments proposed by social information theorists that perceived job characteristics represent the results of a social influence process rather than the objective characteristics of a job (e.g., Salancik & Pfeffer, 1978). Another example of perceptual data in common use is ratings of leadership and supervisory skills. Feedback to supervisors from subordinates, peers, and superiors (so-called 360° feedback systems; Bracken, 1994) has been found to be highly effective for developmental purposes. Other uses of perceptual data include job evaluation (Schwab & Heneman, 1986), job analysis (McCormick, Jeanneret, & Mecham, 1969), employee selection using assessment centers (Finkle, 1976), performance appraisal (Mohrman, Resnick-West, & Lawler 1989), and assessments of organizational culture (discussed below). Perceptual measures have played and continue to play crucial roles in understanding and managing human processes endemic to organizations.

## Evolution of the climate construct

In the section below, we discuss the dynamic nature of climate: how it has been conceptualized and its relation to other relevant perceptual measures.

Subjective versus objective measurement. Researchers have long sought to define organizational climate--and definitions have varied over the years. For many researchers, organizational climate was defined as directly observable measures of organizational structural, technological, and systemic characteristics. Others held to the perceptual, subjectivist view. The varying definitions of climate reflect this dual nature. Forehand and Gilmer (1964) defined climate as consisting of characteristics that (a) distinguish the organization from other organizations, (b) are relatively enduring over time, and (c) influence the behavior of people in the organization. Litwin and Stringer (1966) described climate as objective characteristics of organizations describing the "personality" of the organization. Rentsch (1990) described the evolution of the climate construct from the 1960's to the 1990's. In the 1960's, the definition emphasized enduring, objective organizational characteristics. In the 1970's, the focus shifted to perceptions rather than directly observable organizational characteristics. The 1980's saw an interest in the meaning and sense-making that individuals perceive in their environments, implicating the cultural aspects of organizations. Finally, the 1990's returned to an appreciation of the objective value of group perceptions, while acknowledging the potential for variability of perceptions within organizations.

Climate content. Taxonomies of organizational climate have reflected both the subjective/objective distinction and a consistent theme of equity in the social environment. For example, dimensions identified by Litwin and Stringer (1966) included: structure, individual responsibility, rewards, risks and risk-taking, warmth and support, tolerance and conflict. Campbell, Dunnette, Lawler, & Weick (1970) described four major factors in their review of the literature: individual autonomy, degree of structure, reward orientation, and consideration, warmth and support. More extensive listings of climate dimensions have also been used by researchers. Joyce and Slocum (1984), using factor analysis, reduced a 10-factor climate model to six factors: rewards, autonomy, motivation to achieve, management insensitivity, closeness of supervision, and peer relations (warmth). The elements of climate range from objective to subjective in nature. Dimensions such as "degree of structure" may be more objectively scored while dimensions such as "reward equity" have a more subjective connotation. The latter, it should be noted, can also be measured objectively as the ratio of highest to lowest earnings (Evan, 1963).

Constructs related to climate. In each of the above models, "warmth/tolerance" and "reward equity" play consistent roles, and the construct of equal opportunity climate evolved from this conceptual basis (Landis, Dansby, & Faley, 1993). As mentioned above, equity was a theme in the early formulations of climate by Lewin; equity has been an important dimension of workers' perceptions of their organizations; equity has been the focus of a theory in its own right (viz., Adams, 1963); and, more recently, equity has been the subject of renewed interest in the study of procedural and distributive forms of organizational justice (Greenberg, 1990). Along with the resurgence of organizational justice theory in the form of procedural concerns, there has been an

adoption of the anthropological construct of culture into organizational studies. Organizational culture, as distinct from climate (though some do not recognize the distinction), is idiographic, whereas organizational climate is nomothetic. Culture looks for values specific to an organization, climate looks for behaviors<sup>2</sup>. Culture is interpreted and induced through symbols and traditions; climate is taxonomic and reflected in consensual perception. For whatever reason, recent trends appear to indicate that culture is receiving more research attention than climate. A likely cause is the natural maturation of the climate construct. It has been around for a relatively long time and the major issues associated with its use have been fleshed out. Culture, on the other hand, is relatively new in the organizational science literature, and standard measures have not been as clearly delineated.

The confluence, if there will be one, of organizational justice, climate, culture, and diversity would appear to present organizational scientists a rich vein of study for some time to come. To pursue these research objectives, however, a number of methodological issues should be addressed.

### **Methodological issues**

Two issues are discussed: (a) the appropriateness of aggregating perceptual scores within organizations, and (b) the potential import of attitudinal responses for understanding perceptual issues.

Arguments over the "objectivity" of perceptual measures of organizational climate resulted in warnings about making inferences about organizational climate from aggregated perceptions. Merely averaging the perceptual responses of a group or of an organization does not legitimize those perceptions as homogeneous descriptions of the organizational climate. As Jones & James (1979) pointed out, such measures may be more appropriately designated as "psychological climates." Only when statistical evidence exists for the homogeneity of group responses can the averaged data be taken as representing organizational climate. In preliminary studies of this problem at the Defense Equal Opportunity Management Institute, using responses to the Military Equal Opportunity Climate Survey (MEOCS), the authors have found significant race and gender-related covariation with perceptions of equal opportunity climate in addition to significant cross-organizational clustering. Such evidence suggests that organizations may have multiple climates while at the same time being differentiated within a global taxonomy of climate types.

Recognizing that organizations may subsume multiple perceived climates, many authors have used, in reporting results of organizational surveys, a summarized index of the disparity between demographic groups on perceptions of the organizational climate. The index similar to the effect size associated with the mean difference between any two comparison groups (e.g., majority/minority, men/women, etc.). Dividing the mean difference by the standard deviation of the overall group yields the *d* statistic (Schmidt & Hunter, 1990). We provide a context for judging the intensity of the disparity by providing, for comparison, the mean disparity based on all

---

<sup>2</sup> The distinction here is similar to that between emic and etic.

organizations surveyed. The disparity index then becomes a useful tool for assessing the potential for conflict between groups within the organization.

Another issue concerns the attitude-perception distinction. What is the relationship between them? There is relatively little recent research on the functional relationships between these two types of responses using a single respondent population. In an exploration of this issue, Tallarigo (1994) found an inverse relationship between attitudes and perceptions regarding equal employment opportunity. Using a shortened Modern Racism Scale (McConohay, 1986) and perceived likelihood scales of the MEOCS, respondents endorsing more tolerant racial integration views tended to perceive greater likelihood of adverse racial incidents in the organizational environment, while those whose views on racial integration were less tolerant perceived less likelihood of racist behaviors in the environment. How should attitudes and perceptions be used in organizational training? Do attitudes have diagnostic import? Are there ethical or privacy issues at stake in assessing and changing attitudes regarding diversity in the workplace? These questions are in need of answers as trainers and other human resource practitioners address diversity management in organizations.

Asking organizational members what they see happening in their environment has been, and probably will continue to be, a primary source of information for organizational development. Moreover, the authors would argue that perceptions ought to play such a role. It is a truism that people respond to the world, not necessarily as it is, but as they perceive it to be. Stated simply: perceptions exist, influence work behaviors, and can (and should) be measured. The "more objective" sources of data, however, must also be considered. Both are part of the perceived environment. What are the "more objective" measures? Commonly used data include records, incidence reports, or "expert" ratings provided by specially trained judges. Ultimately, of course, a subjective/objective dichotomy is largely a false dichotomy, and the goal becomes one of convergence between data sources of varying degrees of subjectivity and objectivity. The following grid may depict the problem more clearly.

		Other Sources of Data	
		Observed	Not Observed
Perceptual Data	Observed	Agreement	Disagreement
	Not Observed	Disagreement	Agreement

Fig. 1. Matrix for assessing agreement between types of organizational data.

When there is disagreement between perceptual and other sources of data, it becomes a matter of judgment as to which data source is more accurate.

Measuring organizational climates in organizations has historically and consistently included reward equity and it is proposed that social/organizational climate is clearly relevant for the understanding of workforce diversity. Related studies of procedural justice, culture, attitude measurement, and alternative sources of information may also be part of the necessary patchwork in the study of workforce diversity.

## **Measurement of Equal Opportunity Climate: Recent findings**

Working from a general desire to extend the climate construct to the diversity domain, and in response to a proposal for organizational intervention and development by Dansby, Landis and his colleagues (Landis & Fisher, 1987; Landis, 1990; Dansby & Landis, 1991; Landis, Dansby & Faley, 1993; Landis, Faley & Dansby, 1994) developed the Military Equal Opportunity Climate Survey (MEOCS). MEOCS was based on the following definition of equal opportunity climate:

The expectation by an employee that work-related behaviors directed by others toward the person will reflect merit and not one's racial/ethnic group, gender, national origin or membership in any other minority group (Landis, 1990, p. 29 ).

The current version of the survey consists of 50 behaviors which require an estimate of occurrence over a fixed period of time, 27 attitude statements in Likert-scale format, measures of organizational commitment, job satisfaction, and perceived work-group effectiveness, and several demographic questions. The total time required of a respondent is approximately 40 minutes, though many complete it in significantly less duration.<sup>3</sup>

Succeeding confirmatory factor analyses have consistently shown five reliable factors from the first 50 items: Sexual Harassment/Sex Discrimination Behaviors (SHB), Differential Command Behaviors (DCB), Positive Command Behaviors (PCB), Racist/Sexist Behaviors (RSB) and Reverse Discrimination Behaviors (RDB). The reliability indexes seem impervious to experience, in that data from senior non-commissioned officers does not produce different  $\alpha$ -levels from those computed from junior NCOs (Landis, Dansby & Faley, 1993).

Construct validity of the MEOCS has also been analyzed and found to be satisfactory. Minorities and women consistently rate the EOC less favorable than white men. Officers rate the EOC more favorable than enlisted personnel. These results hold up across services. EOC was found to be less favorable in combat units than in service or service-support units (Tallarigo, 1992). A recent analysis found that the severity of non-judicial punishments was also greater in combat as compared to support units. Hence, it would seem that that the level of EOC is inversely related to discipline problems in a unit.

In June of 1990, MEOCS was released to the services for general use. The method of its utilization is described in a later section of this chapter. However, in the five years since its general availability, MEOCS, which is administered only by request of an organizational head, has proven itself to be an extremely popular tool by commanders at every level in the Services and

---

<sup>3</sup> Strictly speaking, the first 50 items constitute the MEOCS; however, common usage has accorded the total survey with that appellation. Rather than fight a losing battle, we will accede to the common will.

even, in a modified form, for civilian employees in the Department of Defense. To the date of this writing (late January, 1995), close to 300,000 in approximately 2000 units have taken the MEOCS. The factor structure has been extremely stable and the factor means have shown little deviation across time. Tables 1 and 2 present the factor means based on the latest database.

Table 1								
Mean scale values for perceived frequency subclass of the Military Equal Opportunity Climate Survey (MEOCS) by minority/majority status, gender, and branch of service.								
Scales								
Population	Gender	Service	SHB	DCB	PCB	RSB	RDB	N
Minority								
	Female							
		USAF	3.60	3.85	3.59	3.88	4.01	1,002
		USA	3.56	3.72	3.37	3.70	3.89	9,266
		USN	3.51	3.81	3.48	3.55	4.04	4,138
		USMC	3.38	3.72	3.50	3.39	3.86	1,414
	Male							
		USAF	3.78	3.99	3.67	3.82	3.92	3,633
		USA	3.81	3.84	3.39	3.67	3.83	34,544
		USN	3.73	3.92	3.46	3.53	3.96	17,678
		USMC	3.70	3.90	3.56	3.49	3.91	11,129
Majority								
	Female							
		USAF	3.68	4.44	4.06	4.06	4.11	2,307
		USA	3.70	4.37	3.92	3.95	4.04	8,850
		USN	3.67	4.45	4.00	3.85	4.15	7,298
		USMC	3.47	4.39	3.98	3.60	4.10	1,640
	Male							
		USAF	4.04	4.53	4.06	4.10	3.94	12,050
		USA	4.05	4.41	3.83	3.92	3.91	58,827
		USN	4.00	4.48	3.93	3.83	4.03	35,242
		USMC	3.90	4.43	3.96	3.70	3.94	20,028
NOTE: SHB=Sexual Harassment/Discrimination Behaviors; DCB=Differential Command Behaviors; PCB=Positive Command Behaviors; RSB=Racist/Sexist Behaviors; RDB=Reverse Discrimination Behaviors.								

Table 2						
Means on racial attitude scales by minority/majority status gender and branch of service						
			Scales			
Population	Gender	Service	DM	SA	RD	N
Minority	Female	USAF	3.13	4.36	3.76	1,009
		USA	3.01	4.11	3.66	9,291
		USN	3.04	4.24	3.72	4,160
		USMC	2.98	3.96	3.47	1,415
	Male	USAF	3.38	4.36	3.69	3,651
		USA	3.27	4.05	3.55	34,810
		USN	3.27	4.13	3.59	17,781
		USMC	3.26	4.13	3.54	11,188
Majority	Female	USAF	3.83	4.58	3.61	2,313
		USA	3.76	4.47	3.51	8,881
		USN	3.80	4.54	3.50	7,323
		USMC	3.63	4.40	3.38	1,639
	Male	USAF	4.24	4.41	3.30	12,073
		USA	4.11	4.24	3.25	58,462
		USN	4.18	4.33	3.17	35,432
		USMC	4.10	4.20	3.08	20,118

NOTE: DM=Discrimination Against Minorities; SA=Separatism; RD=Reverse Discrimination

### Additional measures of EOC using the MEOCS model

The University Equal Opportunity Climate Survey (UEOCS). A version focused on the university setting was constructed by Landis and his colleagues,<sup>4</sup> The UEOCS-1 is a 141-item preliminary version. This version includes 69 perceptual estimation items, 10 organizational commitment statements, 6 perceived academic effectiveness, 35 attitude items, and 21 demographic items. The perceptual estimate and attitude items were designed to parallel to whatever extent possible the comparable items in the MEOCS. This version was administered to a convenience sample of 611 undergraduates at the University of Mississippi, Oxford campus;

<sup>4</sup> The colleagues for this version are Billy Barrios, Amy Wilson, Michael Raines, Katrina Williams, Joy Armstrong, Teresa Deiterman, Ahmad Karriem, Jonathon Durm, Pyeong-Soo Jung, Cynthia Ruiz and Marina Koval (all of the University of Mississippi).

462 students were white, 63 black, and 26 Asian with the rest from smaller ethnic groups. Of these students, 376 were female and the rest were male. The number of black students is proportionately slightly more than their fraction in the total student body (11.09% vs. 8.96%). The same was true of the female part of the sample.

Structure of the UEOCS: Exploratory factor analyses of the perceptual and attitude items reveal that each is fairly well accounted for by three factors in each set. For the perceptual estimations, the eigenvalues for the first 6 factors were (percent of variance is in parenthesis): 11.95 (37.81%), 5.76 (18.22%), 3.53 (11.17%), 1.72 (5.43%), 1.43 (4.53%), and 1.21 (3.82%). The break between the third and fourth root is quite clear. After varimax rotation, the first factor was found to be marked by 18 items which appears to denote offensive racist behaviors directed at minorities and women. The second factor (14 items) involved discriminatory behaviors directed at minorities by people in authority (administrators, faculty, and fraternity/sorority officers, etc.). Thirteen items mark the last factors and all reflect positive interracial behaviors.

The attitude part of the UEOCS produced two factors with the following eigenvalues: 6.51 (52.77%), and 2.79 (22.70%). The first factor ( $\alpha=.87$ ) after varimax rotation was marked by 17 items all of which tapped negative attitudes toward minorities, women, foreign students and gays together with school pride. The second factor (7 items,  $\alpha=.72$ ) deals with a feeling that discrimination against minorities and women exists on campus and that not enough effort is being expended by the administration in amelioration.

Race/Sex Differences: The first perceptual factor (Racist/sexist behaviors between students) produced a significant effect for gender ( $F=5.17, p<.02$ ) but not for race. However, the overall mean (2.39) indicates that all groups agree that these acts are quite likely to occur. Strong race/sex differences occur for the second perceptual factor (Discriminatory acts by those in authority). All three terms (race, sex, and the raceXsex interaction) were significant ( $F=6.68, p<.01; F=11.49, p<.0008; F=5.93, p<.01$ , respectively). Inspection of the means indicates that the major contributor to the interaction is a difference between black males (Mean=3.21) and black females (Mean=3.65). The white males and females were not significantly different from each other nor were they different from the black females. In other words black males see these behaviors as significantly more likely than do the other groups. The third factor (Positive behaviors) was seen as slightly (though significantly) more likely by females than by males.

Strong race differences occur with regard to the attitude items. On the first factor (Negative attitudes toward minorities), the effect of race was significant ( $F=154.13, p<.0001$ ), with whites agreeing with these items far more than blacks (Means=2.79, 3.85, respectively). A similar pattern occurs for the second factor (Lack of progress on integration) with blacks agreeing more than whites (Means=2.45, 3.14, respectively).

The picture that emerges is a campus in which there is considerable racial tension. Both Blacks and Whites perceive many offensive racist events occurring, but whites do not associate much negative affect with those behaviors. Blacks on the other hand blame the leaders of the campus for the situation, both in terms of commission and omission. The gulf between the groups is as wide, if not wider, than any other group we have assessed.

In general, the patterns described above for the university version fit rather well with those derived from the MEOCS. There are some differences, which if upheld by replication both at this particular college campus as well at other institutions, should give pause to university and college administrators. The mean scores on the first factor (which is the equivalent to the RSB factor from the MEOCS) are among the lowest we have seen so far.<sup>5</sup> The lack of racial differences on this factor may indicate that, in contrast to the military findings, white students agree that these behaviors occur but may not care or realize the implications of such events. The racial differences on the attitude items give some support to this interpretation.

— Equal-Employment Opportunity-Climate (EEOC): Tallarigo (1994) expanded the MEOCS scales to include items tapping sexist behavior, age discrimination, sexual harassment, religious discrimination, and discrimination against the handicapped. He also added scales tapping organizational trust, belief in total quality management, cohesion, traditional and modern racism and attitudes toward women. This new instrument of 132 items was field tested on military and civilians respondents at four DoD sites.

Structure of the EEOC: Factor analysis of the total questionnaire produced four factors accounting for 52% of the total variance. Factor I consisted of all of the perceived incident items (we can call then an incident methodology factor). Factor II captured all of the organizational effectiveness measures and captures 11% of the variance. Factor III was a mixed methodology factor and will need further research to determine the underlying traits. Factor IV was clearly the EO/EEO Attitude scales, consisting of traditional and modern racism and attitudes toward women.

Population differences: A multivariate analysis of variance with the 28 EEOC scales as dependent variables and the military/civilian designation as the independent variables produced a number of highly significant differences. In all but two cases the military respondents scored higher than civilians, the notable exceptions being attitudes towards women and one measure of discrimination against the disabled. These differences are in rough accord with other comparisons between the military and civilians (see the UEOC discussion, above).

Non-American versions: Several colleagues located in non-American universities have expressed interest in developing indigenous versions of the UEOCS. The first such version was one prepared for students in Indian universities,<sup>6</sup> called UEOCS-I. Although this version was prepared in English, the *Lingua Franca* of Indian higher education, several modifications had to be made to make the items relevant to the Indian situation. For racial groups, three caste classifications (Forward/Backward, Scheduled castes/tribes, and other caste minorities) were used. Items then were transformed to deal with interactions between these three groups. Items dealing with sexual and romantic relationships were often rewritten to conform with behavioral norms as perceived by our informants. The final version of the UEOCS-I consisted of 54 perceptual estimate items, 10 organizational commitment, 6 perceived academic effectiveness, 22 caste attitude, and 18 demographic items.

---

<sup>5</sup> For example, a sample of 18-20 year old respondents was extracted from the MEOCS database. This group's mean score on the comparable factor was 3.55.

<sup>6</sup> The colleagues on this version are Chittibabu Govindarajulu and Manimekalai Chittibabu.

The UEPCS-I was administered to 175 undergraduate students in two small colleges affiliated with the same larger university in the Southern part of India during the summer of 1994. Approximately 35% of the sample were female and 65% male (a somewhat oversampling of males and undersampling of women). In terms of caste identification there were 16% forward caste, 65% were backward caste, and 21% were scheduled caste/tribe or otherwise unidentified. This compares with the college populations of about 50-60% backward castes, 18-20% forward castes, and the rest scheduled caste/tribe.

Structure of the UEPCS-I: Three significant perceptual estimation factors were extracted with the following eigenvalues (per-cent-of-variance is in parenthesis): 6.64 (33%), 2.88 (15%), and 2.47 (13%). There was a sharp drop after the third factor. After varimax rotation, the first factor (15 items;  $\alpha=.82$ ) is clearly marked by items involving discrimination and harassment of scheduled caste/tribes and women. The second factor (8 items;  $\alpha=.58$ ) is marked by positive integration actions. The last factor (4 items) seems to reflect reverse discrimination in which members of scheduled castes/tribes receive preferential treatment but has the lowest reliability of all dimensions ( $\alpha=.35$ ).

Two significant factors were obtained from the racial attitude items with eigenvalues of 2.59 (41%) and 1.11 (18%). The first factor (5 items;  $\alpha=.64$ ) seems to reflect discrimination against minorities (comparable to the DM factor in the MEOCS) while the second (5 items;  $\alpha=.58$ ) is marked by items approving of separating the castes (roughly comparable to the SA factor in the MEOCS).

Caste differences: Due to the smallness of the sample, it was necessary to combine cells into a Forward/Backward Caste and an "Other classification." The overall means (combining across both groups) were: Discriminatory Behaviors Against Minorities and Women (DB), 3.85; Positive Behaviors (PB), 2.63; Reverse Discrimination (RD), 3.03, Discrimination attitudes (DA), 3.52 and Caste Separation (CS), 3.21. Only the DB factor produced a significant effect ( $p < .02$ ) and that was for Caste ( $Mean_{forward/backward}=3.90$ ;  $Mean_{other}=3.45$ ). These results are in accord with the other surveys that find majority groups see fewer problematic behaviors than do minority group members.

It is to be emphasized that the UEPCS-I is a preliminary instrument. Some refinement is necessary working with Indian colleagues, and a larger and more representative sample would increase confidence in the results and enhance precision. However, the results that we do have suggest that the MEOCS model has some generality across settings and perhaps even cultures.<sup>7</sup>

#### Other studies using the MEOCS database:

Relationship of Equal Opportunity Climate to Organizational Commitment. Landis, Dansby and Faley (1994) analyzed the data from approximately 80,000 service members in the MEOCS database to explore the link between climate and the individual's commitment to a

---

<sup>7</sup> At this writing, colleagues are developing indigenous EOCS versions for Australia, Netherlands, Canada and Israel.

service career. Grouping the perceptual estimation factors into two second order factors (positive and negative behaviors) and a similar collation for the attitude dimensions, the authors used latent variable analyses to address three hypotheses: 1) EOC (as defined by the perceptual estimation factors) is a significant part of the causal structure; 2) The positive second order factors are more important than the negative factors; and 3) the structure for white males will be significantly different than similar constructions for other race/gender groups. The first and third hypotheses were strongly supported; little support was found for the second. The general model is shown in Figure 2 and the components of that structure are given (in standard lisrel format) in Table 3.

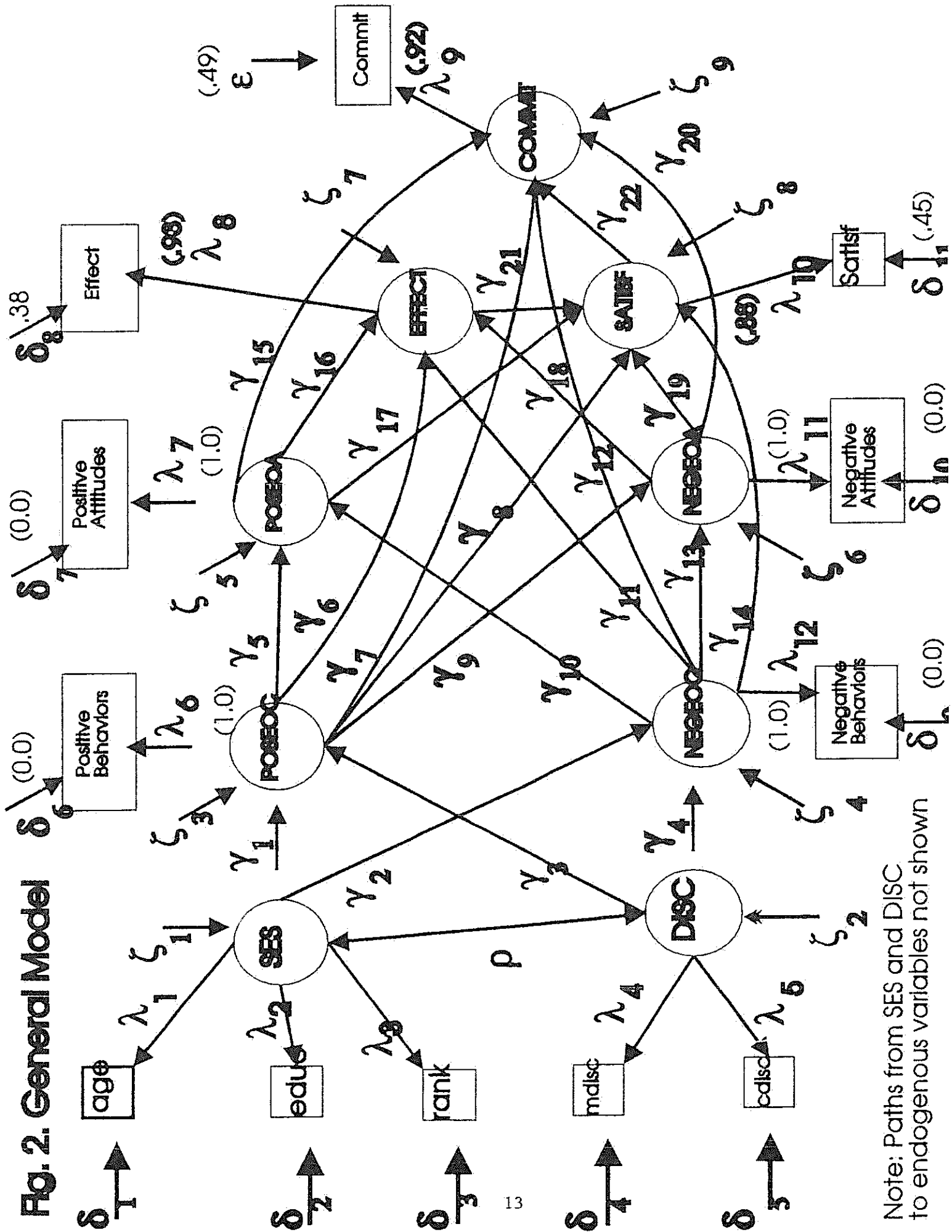
Importance of Equal Opportunity Climate-Variables. When the equal opportunity climate variables were removed from the causal structure, the fit of the model significantly deteriorated. The  $X^2$  difference was 22,770.16 ( $df = 12$ ) and is significant ( $p < .00001$ ). Other indexes of fit showed similar differences (e.g., the Root Mean Square Residual, RMSR, went from .0348 which is acceptable [Bagozzi & Yi, 1988], to .0822, which is unacceptable; Hoelter's Critical N [Hoelter, 1983] dropped from 386, which is considered good, to 144, which indicates a poor fit).

Similarity of Minority Race/Gender Groups to White Males. The model produced an excellent fit for the White Male subgroup. The fit index was .9797 (adjusted index=.9438, RMSR=.0393, and Hoelter's Critical N=320). These are all quite acceptable values. Of the race/gender subgroups, the only one that approached the white males in fit using the White Male weights was the White Females. That group produced a fit index of .9642, adjusted index of .9576, RMSR=.0539, and a Critical N of 362. All of these values are acceptable with the possible exception of the RMSR, which is only slightly larger than the "rule of thumb" of .05 (Bagozzi & Yi, 1988). The poorest fit was produced by the two Asian groups (for Asian Males, the fit index was .8215, for Asian Females it was .7623; all of the other statistics were similar to these results). The next most discrepant subgroup was the African-American Males. Clearly the relationships which characterize the White subgroups were not replicated in the other groups.

Indigenous Analyses of Subgroups. The model provided an adequate fit for all subgroups with the possible exception of Asian-American Females. The RMSR was below .05 for all groups except the Asian-American Females where it was .0503. Hoelter's Critical N was above 200 again for all groups except for the group mentioned above. Using Hoelter's Critical N as an index, the best fits were obtained from the African-American Females (index=549) and Asian-American Males (index=414). The standardized coefficients which resulted in the above fit statistics are given in Table 4.

The race/gender differences noted above can be further examined by inspecting the total (direct and indirect) effects on commitment from each of the other variables (Table 5). It is particularly instructive to compare the effects for the African-American Male and Asian-American Females with those from White Males. As noted above, the two non-white groups were the most different from the White Male subgroup. The major differences between the White Males and African-American Male subgroups were a much larger impact of SES for the latter group over the former (-.26 vs. -.47, respectively), a much larger impact of negative attitudes for the African-American group over the White group (-.14 vs. -.01, respectively), and a much lower effect of

**Fig. 2. General Model**



Note: Paths from SES and DISC to endogenous variables not shown

Table 3. Model Components

<u>Name</u>	<u>Component</u>	<u>From</u>	<u>To</u>
Error Terms (Manifest):			
	$\delta_1$		Age
	$\delta_2$		Education
	$\delta_3$		Rank
	$\delta_4$		Mdisc
	$\delta_5$		Cdisc
	$\delta_6$		Positive Behaviors*
	$\delta_7$		Positive Attitudes*
	$\delta_8$		Effectiveness*
	$\delta_9$		Negative Behaviors*
	$\delta_{10}$		Negative Attitudes*
	$\delta_{11}$		Satisfaction*
	$\epsilon$		Commitment*
Error Terms (Latent):			
	$\zeta_1$		SES
	$\zeta_2$		DISC
	$\zeta_3$		POSEOC
	$\zeta_4$		NEGEOC
	$\zeta_5$		POSEOA
	$\zeta_6$		NEGEOA
	$\zeta_7$		EFFECTIVENESS
	$\zeta_8$		SATISFACTION
	$\zeta_9$		COMMITMENT
Measurement Model:			
	$\lambda_1$	SES	Age
	$\lambda_2$	SES	Education
	$\lambda_3$	SES	Rank
	$\lambda_4$	DISC	Mdisc
	$\lambda_5$	DISC	Cdisc
	$\lambda_6$	POSEOC	Positive Behaviors*
	$\lambda_7$	POSEOA	Positive Attitudes*
	$\lambda_8$	EFFECTIVENESS	Effectiveness*
	$\lambda_9$	COMMITMENT	Commitment*
	$\lambda_{10}$	SATISFACTION	Satisfaction*
	$\lambda_{11}$	NEGEOA	Negative Attitudes*
	$\lambda_{12}$	NEGEOC	Negative Behaviors*

Table 3 (Con't):

<u>Name</u>	<u>Component</u>	<u>From</u>	<u>To</u>
Structural Equations:			
	$\gamma_1$	SES	POSEOC
	$\gamma_2$	SES	NEGEOC
	$\gamma_3$	DISC	POSEOC
	$\gamma_4$	DISC	NEGEOC
	$\gamma_5$	POSEOC	POSEOA
	$\gamma_6$	POSEOC	EFFECTIVENESS
	$\gamma_7$	POSEOC	COMMITMENT
	$\gamma_8$	POSEOC	SATISFACTION
	$\gamma_9$	POSEOC	NEGEOA
	$\gamma_{10}$	NEGEOC	POSEOA
	$\gamma_{11}$	NEGEOC	EFFECTIVENESS
	$\gamma_{12}$	NEGEOC	COMMITMENT
	$\gamma_{13}$	NEGEOC	NEGEOA
	$\gamma_{14}$	NEGEOC	SATISFACTION
	$\gamma_{15}$	POSEOA	COMMITMENT
	$\gamma_{16}$	POSEOA	EFFECTIVENESS
	$\gamma_{17}$	POSEOA	SATISFACTION
	$\gamma_{18}$	NEGEOA	EFFECTIVENESS
	$\gamma_{19}$	NEGEOA	SATISFACTION
	$\gamma_{20}$	NEGEOA	COMMITMENT
	$\gamma_{21}$	EFFECTIVENESS	SATISFACTION
	$\gamma_{22}$	SATISFACTION	COMMITMENT
	$\gamma_{23}$	SES	POSEOA**
	$\gamma_{24}$	SES	EFFECTIVENESS**
	$\gamma_{25}$	SES	SATISFACTION**
	$\gamma_{26}$	SES	COMMITMENT**
	$\gamma_{27}$	SES	NEGEOA**
	$\gamma_{28}$	DISC	POSEOA**
	$\gamma_{29}$	DISC	EFFECTIVENESS**
	$\gamma_{30}$	DISC	SATISFACTION**
	$\gamma_{31}$	DISC	COMMITMENT**
	$\gamma_{32}$	DISC	NEGEOA**

\* Indicates fixed terms

\*\* Not shown on Figure 2

Table 4. Indigeneous standardized coefficients for all race/gender groups.

Group	<u>WM</u>	<u>WE</u>	<u>BM</u>	<u>BF</u>	<u>HM</u>	<u>HF</u>	<u>AM</u>	<u>AF</u>
<b>Error Terms:</b>								
<b>(Manifest)</b>								
$\delta_1$	.75	.77	.56	.73	.82	.75	.41	.50
$\delta_2$	.33	.16	.85	.48	.47	.43	.88	.74
$\delta_3$	.36	.47	.92	.75	.73	.60	.99	.99
$\delta_4$	.35	.53	.39	.49	.46	.66	.55	.61
$\delta_5$	.79	.76	.69	.77	.67	.65	.50	.76
$\delta_6^a$	.00	.00	.00	.00	.00	.00	.00	.00
$\delta_7^a$	.00	.00	.00	.00	.00	.00	.00	.00
$\delta_8^a$	.38	.38	.38	.38	.38	.38	.38	.38
$\delta_9^a$	.00	.00	.00	.00	.00	.00	.00	.00
$\delta_{10}^a$	.00	.00	.00	.00	.00	.00	.00	.00
$\delta_{11}^a$	.45	.45	.45	.45	.45	.45	.45	.45
$\epsilon^a$	.49	.49	.49	.49	.49	.49	.49	.49
<b>Disturbance terms:(Latent)</b>								
$\zeta_1^a$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$\zeta_2^a$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$\zeta_3^a$	.96	.98	.98	.98	.99	.99	.99	.99
$\zeta_4^a$	.98	.91	.83	.86	.88	.88	.90	.93
$\zeta_5^a$	.84	.91	.86	.92	.92	.92	.91	.89
$\zeta_6^a$	.90	.92	.83	.88	.87	.90	.86	.94
$\zeta_7^a$	.54	.57	.55	.61	.45	.62	.43	.36
$\zeta_8^a$	.28	.32	.15	.26	.08	.18	.11	.14
$\zeta_9^a$	.04	.11	.10	.17	.15	.17	.08	.22

Table 2.1 (Con.t)

	WM	WF	BM	BF	HM	HF	AM	AF
<b>Measurement Model</b>								
$\lambda_1$	.50	.48	.66	.51	.42	.50	.77	.70
$\lambda_2$	.82	.91	.39	.72	.73	.75	.35	.51
$\lambda_3$	.80	.73	.28	.50	.52	.63	.06	-.05
$\lambda_4$	.81	.69	.78	.72	.74	.58	.68	.62
$\lambda_5$	.46	.49	.55	.49	.57	.59	.68	.62
$\lambda_6^a$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$\lambda_7^a$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$\lambda_8^d$	.93	.93	.93	.93	.93	.93	.93	.93
$\lambda_9^a$	.87	.87	.87	.87	.87	.87	.87	.87
$\lambda_{10}^a$	.89	.89	.89	.89	.89	.89	.89	.89
$\lambda_{11}^a$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$\lambda_{12}^a$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Structural Equations:</b>								
$\gamma_1$	-.18	-.11	-.08	-.06	-.01	-.02	.03	.05
$\gamma_2$	.11	.06	.15	.06	.12	.11	.20	-.01
$\gamma_3$	.06	.02	.10	.12	.03	.03	.08	-.01
$\gamma_4$	-.03	-.29	-.38	-.37	-.32	-.32	-.25	-.25
$\gamma_5$	.27	.24	.27	.24	.27	.21	.25	.25
$\gamma_6$	.15	.16	.11	.10	.13	.10	.16	.15
$\gamma_7$	.00	-.02	.05	.01	-.01	-.02	.07	-.04
$\gamma_8$	-.05	-.07	-.02	-.04	-.01	-.07	-.01	-.02
$\gamma_9$	-.21	-.21	-.23	-.24	-.25	-.19	-.25	-.18
$\gamma_{10}$	-.02	-.05	-.05	-.06	-.02	-.06	-.03	-.04
$\gamma_{11}$	-.11	-.10	-.01	.02	-.07	-.07	-.08	-.07

4  
Table 4 (Cont)

	<u>WM</u>	<u>WF</u>	<u>BM</u>	<u>BF</u>	<u>HM</u>	<u>HF</u>	<u>AM</u>	<u>AF</u>
<b>Structural Equations (con't):</b>								
$\gamma_{12}$	-.07	-.09	-.11	-.12	-.11	-.14	-.09	-.10
$\gamma_{13}$	.22	.21	.24	.22	.27	.24	.25	.16
$\gamma_{14}$	-.01	.02	.01	.03	.00	.04	.03	-.09
$\gamma_{15}$	.10	.17	.12	.20	.10	.13	.04	.09
$\gamma_{16}$	.27	.21	.28	.22	.40	.19	.32	.43
$\gamma_{17}$	-.20	-.19	-.16	-.18	-.14	-.23	-.20	-.12
$\gamma_{18}$	-.12	-.09	-.15	-.11	-.18	-.08	-.16	-.30
$\gamma_{19}$	-.02	.03	.05	.08	-.01	.03	-.04	-.05
$\gamma_{20}$	.04	.02	-.07	-.12	-.04	-.02	-.05	-.15
$\gamma_{21}$	-.63	-.56	-.74	-.65	-.85	-.68	-.77	-.74
$\gamma_{22}$	-.81	-.76	-.56	-.55	-.71	-.68	-.73	-.72
$\gamma_{23}$	-.20	-.13	-.23	-.12	.01	-.16	-.18	-.10
$\gamma_{24}$	.07	.12	-.11	-.11	.02	-.11	-.19	-.12
$\gamma_{25}$	-.03	.00	.04	-.01	-.05	-.07	.08	.18
$\gamma_{26}$	-.12	-.06	-.26	-.18	-.17	-.13	-.10	.18
$\gamma_{27}$	.01	.03	.12	-.05	.03	.09	.12	.08
$\gamma_{28}$	.11	.05	-.04	.01	-.07	-.04	-.07	-.21
$\gamma_{29}$	.06	.03	-.10	.04	-.05	-.04	-.03	-.05
$\gamma_{30}$	-.07	-.12	-.04	-.06	-.03	-.15	-.05	-.09
$\gamma_{31}$	.02	.00	.09	-.06	.09	-.06	.03	.13
$\gamma_{32}$	.15	.13	-.07	-.04	.05	.12	.06	.04
<b>Covariance</b>								
$\rho$	-.15	.02	.02	.08	-.05	-.02	.02	-.22

<sup>a</sup> Figures in these rows are fixed.

4  
 Table 8. Total effects of latent variable predictors on commitment by group

Predictor	Group							
	WM	WF	BM	BF	HM	HF	AM	AF
Satisfaction	-0.8127	-0.7603	-0.5606	-0.5486	-0.7097	-0.6805	-0.7343	-0.7226
Effectiveness	0.5119	0.4216	0.4173	0.3537	0.6038	0.4599	0.5621	0.5356
EOAP	0.3969	0.4009	0.3301	0.3707	0.4359	0.3767	0.3692	0.4057
EOAN	-0.0097	-0.0401	-0.1408	-0.1996	-0.1378	-0.0773	-0.1076	-0.2717
EOCP	0.2257	0.2028	0.2288	0.202	0.2258	0.1666	0.2704	0.2049
EOCN	-0.1295	-0.1785	-0.1696	-0.197	-0.1995	-0.2458	-0.1935	-0.1375
SES	-0.2588	-0.191	-0.4682	-0.286	-0.1439	-0.2284	-0.3817	-0.0753
DISC	0.1708	0.1747	0.1615	0.1684	0.1101	-0.0882	0.0824	0.0968

job satisfaction for the African-American group (-.56 for the African-American vs. -.81 for the White group).

For the Asian-American Female and White Male comparison, the results show a slightly lower impact of satisfaction (-.72 vs. -.81), a much higher impact of negative attitudes (-.27 vs. -.01), and a lower impact of SES (-.06 vs. -.26). These results clearly indicate that the reasons why people feel committed to the Service vary by subgroup. It should be mentioned that the dimensions being tapped by the negative attitudes factor involve a perception of discrimination in the work environment. In all cases, those attitudes are closely related to perceived negative behaviors for the minority groups, but much less so for the White Males. Figure 3 shows the disparity between the groups when the data in Table 4 is used to predict commitment and job satisfaction.

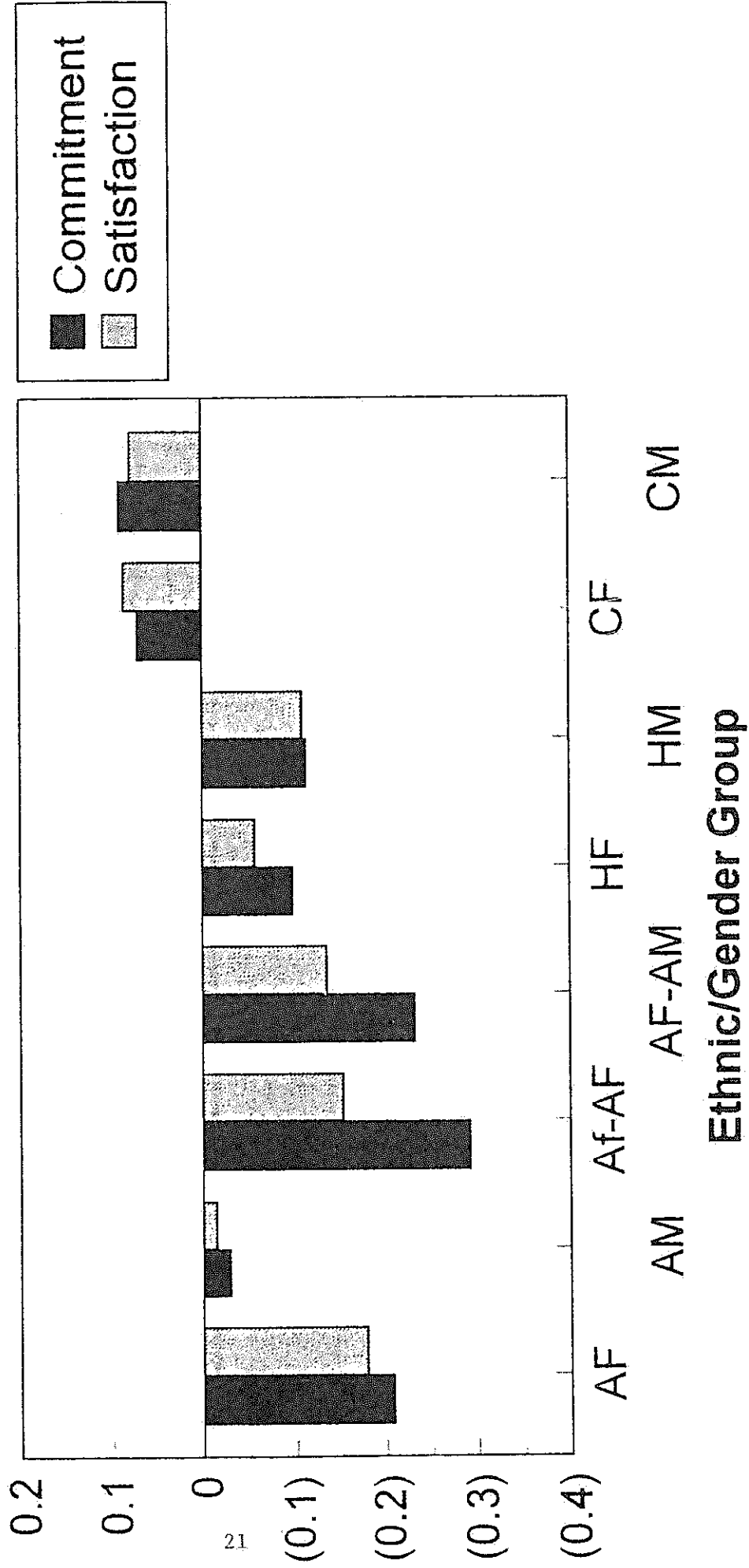
The relationship of EOC to unit characteristics Tallarigo & Landis (1995) studied the relationship of perceptual estimation dimensions to unit attributes using multidimensional analysis. Mean unit scores on the five perceptual estimation factors were used to define distances in a 5-dimensional Euclidean space. These distances were subjected to a multidimensional scaling algorithm which resulted in three dimensions. The rotated dimensions (on which each of 955 units were located) were related to a number of unit characteristics: a) mission type (combat vs. combat support), b) the size of the unit, c) the proportion of people in the unit who reported having been a victim of discrimination, d) the percentage of minorities in the unit, and e) the level of organizational commitment, job satisfaction, and perceived work group effectiveness. The first dimension was labeled, based on canonical discriminant function analysis, as reflecting units that consist of a high percentage of alienated victims who see themselves as being ineffective. The second dimension was named "Non-integrated and dispirited," and the third seems to reflect majority individuals who feel discriminated against as well as minorities who feel isolated. Based on this study, we can assert, with some degree of confidence, that EOC is related to objective characteristics of the organization.

The relationship of EOC to TQM. Knouse (1994) explored the potential relationship of Total Quality Management to EOC in a study of three units. Each of these units had received recognition for having a TQM program and had also recently completed a MEOCS. Using the "quality" item from one of the MEOCS subscales, Knouse found significant relationships with the other climate variables. Using a regression approach, it was found that equal opportunity climate is not a significant predictor of judged quality of work for majority individuals, but is for minorities and women. This study, while provocative in its conclusions, must be considered exploratory and tentative. The sample was quite small and no independent measures (external to the MEOCS) existed for the level of achievement of TQM.

The relationship of EOC to group cohesion: Neibuhr, Knouse & Dansby (1994) correlated the EOC factors with measures of group cohesion in both a military and civilian sample. "Racism" and "Sexism" scales of six items each were constructed from the critical incident items. The MEOCS items were translated into a civilian setting for the non-military version (Neibuhr, 1994). Cohesion measures were appropriate for each situation. Results indicated that sexism and racism were negatively correlated with cohesion (-.23, -.27 in the

# Figure 3. Predicted Commitment and Satisfaction by Group

Standardized Commitment and Satisfaction Score



military; -.29, -.25 in the civilian) and performance (-.16, -.21 in the military; -.20, -.16 in the civilian).

The preceding discussion of results from the MEOCS database offers a macro view of the use of such surveys and how those data can be used to answer theoretically interesting questions. However, the basic design of the MEOCS is aimed at serving individual organizations in developing more favorable organizational EOC. The next section describes how this is accomplished and gives the underlying philosophy for the MEOCS approach.

## **The use of EOC in Organizational Change**

Surveys are classic tools used by organization development (OD) consultants as a basis for organizational assessment and change (e.g., Schein, 1969; Bowers & Franklin, 1975; Hausser, Pecorella, & Wissler, 1977; French, 1985). Landis, Dansby, and Faley (1993) describe the philosophy and program supporting MEOCS as an aid to organizational improvement. As an OD tool, MEOCS is well accepted by military commanders and organizational leaders in the U.S. military services (having been requested by over 2,600 organizational heads and administered to over 325,000 respondents). Because of the efficiencies attained by centralized administration and analysis of the survey, MEOCS has become the single most used OD survey reported in the literature. In some respects, therefore, it might serve as a contemporary model for OD survey-guided intervention in large organizations. In this section, we discuss general principles of survey-guided intervention in the context of a broader OD model developed in the U.S. Army organizational effectiveness (OE) community. These principles could readily be extended to an international and intercultural context, as discussed elsewhere in this chapter.

### **Background: Organizational Surveys as an OD Tool**

Bowers and Franklin (1975) describe the basic process of survey-guided development, and Hausser, Pecorella, and Wissler (1977) summarize its main goal: "to facilitate interventions or changes in organizational functioning that will lead to increased organizational effectiveness by providing accurate and useful information about how an organization actually functions, how it might ideally function, and how to make the actual functioning more like the ideal functioning" (p. 5). For a comprehensive review of the development of the survey feedback approach, see French (1985). French (1985) identifies the work of Rensis Likert at the Survey Research Center (founded in 1946) at the University of Michigan as the intellectual roots of the OD survey. Perhaps the classic intervention model is that described by Schein (1969). The model involves seven steps:

- (1) Initial contact with the client organization;
- (2) Defining the relationship, formal contract, and psychological contract;
- (3) Selecting a setting and a method of work;
- (4) Data gathering and diagnosis;
- (5) Intervention;
- (6) Reducing involvement;
- (7) Termination. (Schein, 1969, p. 78)

Other researchers and practitioners have described similar models (e.g., Lippitt & Lippitt, 1978; Nadler, 1977; Umstot, 1980; Landis, Dansby, & Faley, 1993). Elsewhere we have described the model used with the MEOCS (Landis, Dansby, & Faley, 1993), along with its unique features when compared to more traditional OD surveys. The MEOCS approach is based on a six-step model:

(1) **CONTACT** (bringing together the military commander and the survey managers at DEOMI)

~~(2) **CONTRACT** (setting the mutual expectations, or psychological contract, between the organization and DEOMI)~~

(3) **DATA GATHERING** (administration of the survey in accordance with standard guidelines)

(4) **DATA ANALYSIS** (processing the raw responses into meaningful information)

(5) **FEEDBACK OF INFORMATION** (conveying understandable and useful results to the organization's leaders)

(6) **FOLLOW-UP** (using the results to effect organizational change and improvement).

As discussed previously (also see Landis, Dansby, & Faley, 1993), MEOCS measures a number of equal opportunity (EO) and organizational factors that are of interest to military leaders. It is a voluntary, confidential survey, with feedback returned exclusively to the requesting commander. Consequently, MEOCS is an ideal tool for a commander who desires a self-assessment of his or her unit prior to proactive intervention to improve the productivity of the unit and quality of life for its members. The commander controls how the survey is used; confidentiality lessens fear of the misuse of information (for political manipulation, etc., see Zawacki & Warrick, 1976). Such control and "ownership" is critical to the success of MEOCS as a tool for constructive change (Bowers & Franklin, 1975; Landis, Dansby, & Faley, 1993).

Upon receiving a letter of request from a commander, the staff from DEOMI's Directorate of Research determine which version of the survey (based on gender composition and other unit demographics) is appropriate and send the requesting commander a camera-ready copy, along with answer sheets and instructions for proper administration. A unit project officer reproduces the survey booklets, administers the survey according to DEOMI's guidelines, and returns the completed response forms. Response forms are scanned into a raw data file, which is subsequently analyzed using a commercial statistical analysis program. The data are also added to a cumulative database maintained at DEOMI. A series of computer programs developed by the second author collect and format output from the statistical program and automatically generate a feedback package, which is returned to the commander. The package includes comparisons between the unit's results and the overall database averages for the appropriate service and the military overall, as well as a number of within-unit demographic comparisons (minority/majority, women/men, etc.). These within-unit comparisons are particularly important. They often indicate

gaps in perceptions among the various groups. This can be enlightening for organizational leaders and lead to constructive conversation to identify why the perceptions differ and what can be done to improve the organizational climate.

After the results are returned to the unit, it is up to the commander to conduct (or not) follow-up actions. Most commands have EO program advisors, who may be directed to establish an action plan. DEOMI also provides consultation and mobile training teams at the commander's request (the unit must pay for travel and per diem expenses; there is no charge for the consultation or training).

## **Organizational Effectiveness (OE) Model**

As mentioned previously, MEOCS is conducted in the context of a broader organizational intervention and is part of a systems approach to OD. In the late 1970's and early 1980's, the U.S. Army conducted an extensive OE program to help commanders and organizations become more effective. (The Air Force and Navy had similar programs, all of which were eliminated due to budget cuts and other exigencies.) A simple four-step model underscored the philosophy of the Army's program, which was taught in the Organizational Effectiveness Center and School, Fort Ord, California, and the Center for Leadership and Ethics Leader Development Program at the United States Army Command and General Staff College, Fort Leavenworth, Kansas. The OE view is a systems approach, and the model (commonly known as APIE, based on the initial letters for the first word in each step) includes the following steps for rational intervention and organizational change:

- (1) **A**ssess current operation
- (2) **P**lan for change
- (3) **I**mplement change
- (4) **E**valuate change (U.S. Army Center for Leadership and Ethics)

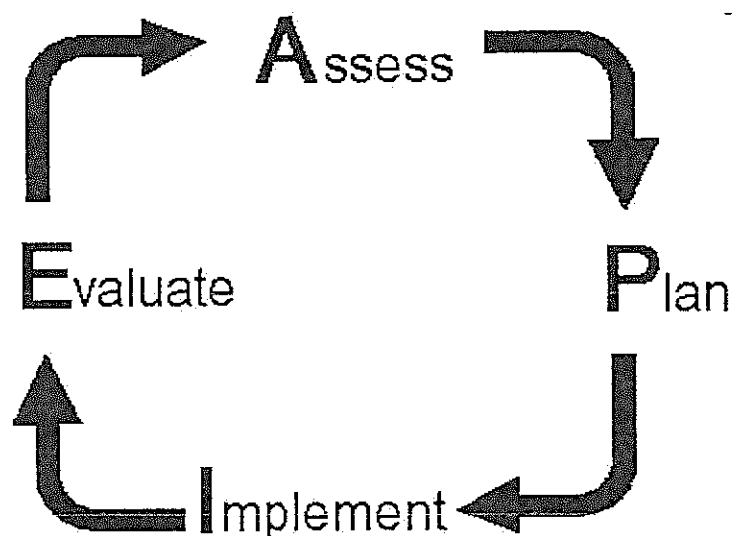
The APIE process is viewed as continuous and is similar to other models of organizational change, such as the planned-change process discussed by Harvey and Brown (1988), Schermerhorn, Hunt, and Osborn (1991), and Hellriegel and Slocum (1992). The figure below (an abbreviated version) illustrates the iterative nature of the model.

The APIE model provides an apt framework for discussing the use of surveys in OD.

### **Using OD Surveys in the APIE Model**

The systems approach (e.g., Harvey & Brown, 1988; Hellriegel & Slocum, 1992; Schermerhorn et al., 1991) views organizations as open systems with inputs, processes, and outputs. The APIE model focuses on the process stage, and within the APIE context, surveys

such as MEOCS can fulfill several functions in helping organizations change and grow. They serve to provide systems information about organizational processes; when used properly, this information can lead to quality improvement in the organization.



In general, OD philosophy emphasizes helping the client help himself or herself (Schein, 1969) using a collaborative approach (Harvey & Brown, 1988). Commitment ("ownership"; Bowers & Franklin, 1975) by the top organizational leadership is essential to the success of the OD intervention. Without it, much energy may be wasted in attempts to discount the validity of the process or the results (Harvey & Brown, 1988), and few positive outcomes would be expected. The leadership also has the power to influence others (Schein, 1969; Schein, 1985; Harvey & Brown, 1988; Schermerhorn et al., 1991), facilitating meaningful intervention.

Once leadership commitment to the process is attained, surveys can aid in what is commonly called a "gap analysis" (Harvey & Brown, 1988), in which a current state is compared to a desired state. The difference, or gap, between these two states is used as a basis for action planning to close the gap. Within the APPIE model, the Assess stage is where the current state is determined. The survey provides a comprehensive, often less biased, view of the current state. In the case of MEOCS, the gaps considered are in the areas of EO and OE, or more generally, human relations and organizational process. It is important to recognize that surveys are only one among many tools that may be used in the gap analysis. Interviews, examination of organizational records and reports, and systematic observations are examples of other tools that may (and should) be used as well. Information from all sources should be considered in order to validate and clarify survey results.

Once the current state is determined, the planning begins. In the Plan step, potential ways of bridging the gap between the current and desired states are explored. The survey results are used as a basis for planning interventions more rationally. In providing information regarding specific concerns, the results help bring focus and direction to the planning. Broad organizational involvement is needed to foster support for planned interventions and to help overcome the normal resistance to change (Harvey & Brown, 1988; Schermerhorn et al., 1991). Sharing the

survey results with the entire organization can help generate a sense of involvement and, by highlighting the concerns (based on information provided by unit members), motivate members to participate in the change process.

The next step in APIE is to **Implement** the planned actions. Normally the interventions will occur over some time, and it will take additional time for the actions to gain acceptance and have an effect in the organization. The purpose of the interventions is to help close the gap between the current and desired states. Consequently, some method of assessing the effects of the interventions is needed to determine how much progress (if any) has been made in closing the gap.

This is where the survey is again useful. When the organization is ready to **Evaluate** the impact of its actions, the original survey results may be used as a baseline for comparison with a second survey administered after the intervention process is complete. It is essential that the survey versions be comparable in order to use this pre- post-intervention evaluation methodology effectively. The results of the evaluation may reveal the actions taken were effective; on the other hand, they may imply old action plans need adjustment or new actions must be formulated. The commander and organizational staff evaluate the need for adjustment and proceed from there.

Since the APIE process is iterative, it should be repeated periodically to keep commanders aware of organizational issues and facilitate constructive change. Because MEOCS provides an inexpensive, informative, and useful tool for commanders who want to pursue rational change, it encourages commanders to use the APIE process. The desired result is a more effective organization with more motivated members.

## **Conclusion**

The use of MEOCS as an OD/OE tool, within the framework of a systems model (APIE) provides many advantages to users. Among these are the ability to gain insight into human relations and effectiveness using a more objective approach than is typical in many organizations, while at the same time costing the organization relatively little. The value of this information, when properly validated, is great; it can facilitate gains in effectiveness of the organization and satisfaction of its members.

In a broader intercultural context, the survey methodology also has much to offer. If properly designed, conducted, and analyzed, and if the results are properly used, it can increase communication across demographic barriers. This can lead to increased sensitivity and intercultural understanding, better human relations, and increased individual satisfaction. Though MEOCS models the process in a military context, it could easily be applied in other settings, such as communities, schools, universities, police and fire departments, other government agencies, businesses (especially international), and religious organizations. This potential should not be overlooked when seeking ways to improve understanding and human relations.

## References

- Adams, J. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67, 422-436.
- Bagozzi, R. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bowers, D. G., & Franklin, J. L. (1975). *Survey-guided development: Data-based organizational change*. Ann Arbor, MI: Institute for Social Research.
- Braken, D. (1994). Straight talk about multi-rater feedback. *Training and development journal*, September
- Bruner, J., & Tagiuri, R. (1954). The perception of people. In G. Lindzey (Ed.), *Handbook of social psychology*, vol. 2. Reading, MA.: Addison-Wesley.
- Campbell, J., Dunnette, M., Lawler, E., & Weick, K. (1970). *Managerial behavior, performance, and effectiveness*. New York: McGraw-Hill.
- Joyce, W., & Slocum, J. (1984). Collective climate: Agreement as a basis for defining aggregate climates in organizations. *Academy of Management Journal*, 27, 721-742.
- Center for Leadership and Ethics. (undated). *Leader Development Program Trainers Course Handbook*. Fort Leavenworth, KS: United States Army Command and General Staff College.
- Dansby, M. & Landis, D. (1991). Measuring equal opportunity in the military environment. *International journal of intercultural relations*, 15, 399-406.
- Evan, W. (1963). Indices of hierarchical structure of organizations. *Management Science*, 9, 468-477.
- Forehand, G., & Gilmer, B. (1964). Environmental variation in studies of organizational behavior. *Psychological Bulletin*, 62, 361-382.
- French, W. L. (1985). The emergence and early history of organization development with references to influences upon and interactions among some of the key actors. In D. D. Warrick (Ed.), *Contemporary Organization Development*. Glennview, IL: Scott, Foresman and Company.
- Greenberg, J. (1990). Organizational justice: Yesterday, today, tomorrow. *Journal of Management*, 16, 399-432.

- Hackman, R., & Oldham, G. (1976). Development of the Job Diagnostic survey. *Journal of Applied Psychology*, 60, 159-170.
- Harvey, D. F., & Brown, D. R. (1988). *An experiential approach to organization development*. Englewood Cliffs, NJ: Prentice Hall.
- Hausser, D. L., Pecorella, P. A., & Wissler, A. L. (1977). *Survey-guided development II: A manual for consultants*. La Jolla, CA: University Associates.
- Hellriegel, D., & Slocum, J. W. (1992). *Management*. New York: Addison-Wesley.
- Hoelter, J. (1983). The analysis of covariance structures: Goodness of fit indices. *Sociological Methods and Research*, 11(3), 325-344.
- Jones, A., & James, L. (1979). Psychological climate: Dimensions and relationships of individuals and aggregated work environment perceptions. *Organizational Behavior and Human Performance*, 23, 201-250.
- Knouse, S. (1994). Equal opportunity climate and total quality management: A preliminary study. *DEOMI Research Pamphlet 94-3*. Defense Equal Opportunity Management Institute, Patrick AFB, FL.
- Landis, D. (January, 1990). *Military equal opportunity climate survey: Reliability, construct validity and preliminary field test*. Oxford: University of Mississippi, Center for Applied Research and Evaluation.
- Landis, D., Dansby, M., & Faley, R. (1993). The Military Equal Opportunity Climate Survey: An example of surveying in organizations. In P. Rosenfeld, J.E. Edwards, & M.D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp 122-142). Newbury Park, CA : Sage.
- Landis, D., Dansby, M. & Faley, R. (1994). The relationship of equal opportunity climate to military career commitment: An analysis of individual differences using latent variables. Paper presented at the 1994 meetings of the Psychology in DoD Symposium. Colorado Springs, April.
- Lewin, E. (1948). *Resolving social conflict: Selected papers on group dynamics*. New York: Harper & Row.
- Lindzey, G., & Aronson, E. (1985). *Handbook of social psychology, vol. I*. New York: Random House.
- Lippitt, G., & Lippitt, R. (1978). *The consulting process in action*. San Diego, CA: University Associates.

- Litwin, G., & Stringer, R. (1968). *Motivation and organizational climate*. Boston: Harvard University Press.
- Locke, E. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*. Chicago: Rand-McNally.
- Mayer, J. & Abramson, J. (1994) *Strange Justice: The Selling of Clarence Thomas*. Boston: Houghton-Mifflin.
- McConohay, J. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J.F. Dovidio & S.L. Gaertner (Eds.), *Prejudice, discrimination and racism* (pp91-125). Orlando, FL: Academic Press.
- McCormick, E., Jeanneret, P., & Mecham, R. (1969). *Position Analysis Questionnaire*. West Lafayette, Indiana: Purdue Research Foundation.
- Mohrman, Jr., A.M., Resnick-West, S.M., & Lawler, III., E.E. (1989). *Designing performance appraisal systems: Aligning appraisals and organizational realities*. San Francisco: Jossey-Bass.
- Nadler, D. A. (1977). *Feedback and organization development: Using data-based methods*. Reading, MA: Addison-Wesley.
- Niebuhr, R. (1994). *Measuring equal opportunity climate in organizations: Development of scales to evaluate the acceptance of diversity*. (Pamphlet 94-5). Patrick AFB, FL: Directorate of Research, Defense Equal Opportunity Management Institute.
- Neibuhr, R., Knouse, S., & Dansby, M. (1994). *Workgroup climates for acceptance of diversity: Relationship to group cohesiveness and performance*. (Pamphlet 94-4). Patrick AFB, FL: Directorate of Research, Defense Equal Opportunity Management Institute.
- Rentsch, J. (1990). Climate and culture: Interaction and qualitative differences in organizational meanings. *Journal of Applied Psychology*, 75, 668-681.
- Salancik, G., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253.
- Schein, E. H. (1969). *Process consultation: Its role in organization development*. Reading, MA: Addison-Wesley.
- Schein, V. E. (1985). Organizational realities: The politics of change. In D. D. Warrick (Ed.), *Contemporary Organization Development*. Glenview, IL: Scott, Foresman and Company.

- Schermerhorn, J. R., Hunt, J. G., & Osborn, R. N. (1991). *Managing Organizational Behavior*. New York: John Wiley & Sons.
- Schmidt, F., & Hunter, J. (1990). *Methods of meta-analysis*. Newbury Park: Sage.
- Sonnenfeld, J. (1982). Clarifying critical confusion in the Hawthorne hysteria. *American Psychologist*, 37, 1397-1399.
- Tallarigo, R. S. (1992). [Differences between combat, combat support, and combat service support units on the Military Equal Opportunity Climate Survey]. Unpublished raw data.
- Tallarigo, R. S. (1994). MEOCS-EEO: Broadening the view. Paper presented at the DoD Worldwide Equal Opportunity Conference, December 7, Cocoa Beach, FL
- Tallarigo, R.S. & Landis, D. (May, 1995). Organizational distance scaling: Exploring climates across organizations. Paper presented at the 1995 annual conference of the Society for Industrial and Organizational Psychology. Orlando.
- Umstot, D. D. (1980). Organization development technology in the military: A surprising merger? *Academy of Management Review*, 5(#2), pp. 189-201.
- Zawacki, R. A., & Warrick, D. D. (1976). *Organization development: Managing change in the public sector*. Chicago, IL: International Personnel Management Association.



