International Review of Industrial Sociology
Spring 2014, Vol. 13, No 2: 24-58
Mahmoud Kashefi

Structural imperatives and work values:
*Examining the industrial, organizational, and occupational sources of variation in work values**

Mahmoud Kashefi
Eastern Illinois University
Department of Sociology/Anthropology

This paper attempts to explore the extent to which industrial, organizational, and occupational imperatives, additively and/or interactively, explains the variations within four types of work values, the importance of income, job security, advancement, and personal achievement. Using the General Social Survey (GSS) data, the findings reveal that the development of the economic sectors, core versus periphery, as well as the structure of authority within an organization, directly and/or indirectly, through job characteristics particularly substantive complexity, significantly affect the variation in work values. The findings unfolds that a single theory of work value is not robust enough to explain the degree of values an employee attaches on different facets of her/his job. Thus, the result endorses an inclusive theory of work values which articulates the propositions of both the structural imperatives and the pre-workplace socialization theories.

Keywords: Work value, structural imperative, economic sectors, substantive complexity, organizational authority

* Acknowledgement: I am grateful to unanimous reviewers of International Journal of Industrial Sociology (IRIS); any and all problems remain mine.

Direct all correspondence to: Max Kashefi, Emeritus professor of sociology, Department of Sociology/Anthropology. Eastern Illinois University, Charleston, IL 61920; E-mail mkashefi@eiu.edu

Introduction:

The literature in work and occupations has displayed a considerable body of research involving work values. Some scholars have been interested in work values because of evidence that has linked the variation in work values to social stratification. Members of different social classes value the facets of their jobs differently (Form and Geschwender 1962; Kalleberg and Griffin 1978 and 1980; Kohn and Schooler 1969; Ronen and Sadan 1984; Rowe and Snizek 1995). Other social scientists have concerns with the subject because work values determine job satisfaction. Job satisfaction cannot be thoroughly explained without having knowledge of the meaning and the importance that employees attach to the dimensions of their work (Centers and Bugental 1966; Goldthrope et al. 1968; Kalleberg 1977; Kashefi 2005 and 2011; Loscocco 1990; Mortimer and Lorence 1979; Mottaz 1987; Neil and Snizek 1988). Still many others have been motivated to study work values because of their personal values, which assume work not as a means but as an end in itself. Work is, and should be, an "opportunity source" in which workers use their discretion--initiatives, judgments, and decision making abilities (Braverman 1974; Gruenberg 1980; Kashefi 2011; Kohn and Schooler 1973; Sokoloff 1988).

Work values reflect an individual's conception of the importance of the different facets of work. Some workers, for example, attach higher values to income or benefits than to promotion. Others are more concerned with the opportunities in which they can exercise their abilities in decision making, judgment, and creativity. Work values, however, are not ephemeral attitudes of a worker, merely dependent upon the personal characteristics of an individual and her/his socialization which occur prior to her/his entry to the workplace. Rather, one's work values change based on the structural features of positions occupied by employees within the workplace organization. This paper, following the theoretical discussions and empirical studies, proposes three structural variables as the sources of variation in work values-- occupational imperatives which cover the impacts of "substantive task complexities" in work values; organizational imperatives, which explain the effects of organizational hierarchy in work values; and industrial imperatives, which explore the changes in work

values produced by the nature of industrial sectors. These three structural variables have been used often in previous studies to explain job rewards (e.g. Kalleberg 1977; Kalleberg and Griffin 1980; Kashefi 2005; Kohn and Schooler 1973 and 1983), job satisfaction (e.g. Hedley 1984; Martin and Shehan 1989; Mottaz 1987), work and organizational commitment (e.g. Halaby 1984; Halaby and Weakliem 1989; Loscocco 1990; Marsden et. al.1993), and other work related issues. They have never been analyzed as sources of variation on work values, especially in the manner covered in this study.

Theories in work values: Previous studies in the social psychology of work have introduced two types of explanations for the variation in work values. The focus of the first view is on socialization that occurs prior to the individual's entry into the workplace (hereafter, pre-entry socialization). Proponents of this view assume that work values are formed early in life during childhood socialization, and later through formal education. This view, sometimes referred to as the "individualist" or "dispositional" paradigm, is based on the propositions that the members of different social classes, gender groups, religious profiles, and aging cohorts produce different values and priorities, which in turn, effect on their occupational choices and opportunities, and then persist throughout the work place (Anderson 1985; Kashefi 2005; Statham 1987). Children of upper class families with higher income and education highly value intrinsic rewards and hunt for jobs with more intrinsic rewards (Mortimer and Lorence 1979). Women are socialized to express greater concern than men with flexible work hours and working with people. On the other hand, men tend to attach higher value to income, job security, and advancement (e.g. Betz and O'Connell 1989; Kashefi 2002). One's moral stature or religious beliefs also motivate her/him to work hard. The Protestant work ethic endorses the idea that hard work is intrinsically good and an end in itself. Thus, Protestants, more than the other religious groups attach relatively higher values to job rewards. The other version of this view focuses on formal education through which work values are formed and changed. First, prolonged contacts with the educational institution condition a prospective employee to attach high value to intrinsic rewards (Martin and Shehan 1989). Furthermore, higher educational attainment puts people at a competitive advantage in hunting for jobs with more extrinsic rewards (Sewell and Hauser 1976). Finally, different high schools

organizations (for example, private versus public or religious versus secular) train their students in different behavioral and attitudinal traits suited to the social class origins and destination of students (Anderson 1985). Thus, the core of the pre-entry socialization theory is the variation in work values rooted in the family and educational background which persist throughout the workplace.

The second set of theories, on the other hand, emphasize on importance of the work environment in shaping work values (Feldberg and Glenn 1979; Kalleberg and Griffin 1978; Kanter 1977; Kashefi 2005 and 2011; Kohn and Schooler 1973). This view highlights structural imperatives, especially job characteristics, in determining work values. Advocates of this theory assert that regardless of the pre-entry socialization, workers tend to adjust their values to the conditions of the workplace over time--workplace accommodation. The major implication of these theories is that if one is exposed to the same work conditions, irrespective of one's gender, religion, and social class, he/she gradually learns to develop similar work values, since job characteristics exert the same influences on the attitudes of employees. For instance, jobs with lower opportunities for upward mobility lead to lower interest in advancement and accomplishment, and greater interest in security and monetary rewards (Kanter 1977; Kashefi 2011; Wilson 2010). Consistent with the structural imperatives on work values, some studies reveal no major differences between racial groups (Kashefi 2011) or gender on work values when the occupational characteristics and held constant (Brief et al., 1977; de Vaus and McAllister 1991; Rowe and Snizek 1995).[1]

In addition to these two perspectives, some studies display both additive and interactive effects of socialization and structural variables on work values (Caston and Braito 1985). The socio-economic conditions of the family and the employees' formal education shape their work values, which affect their occupational choices and opportunities. Employees with higher levels of formal education and with higher levels of parental education and income more likely select jobs with higher intrinsic rewards (interactive effects). On the other hand, the workplace structural imperatives mold pre-entry work values or generate concerns about them. When the workplace structural imperatives put limits on the opportunities within which the pre-entry

work values should be realized, the employees either reshape the pre-entry value system to match with the structural necessity, or they remain firm with the pre-entry work values and reflect their concerns on them. Therefore, the attitudes of an employee on the importance of work facets can be either a reflection of the workplace structural socialization or a reaction to the structural limitation imposed on realizing the pre-entry work values.[2]

Previous research: While work values have been a great concern of occupational psychologists and sociologists, there have also been extensive studies exploring the relationships between work values and job satisfaction, racial inequality, social classes, workplace productivity, and many other workplace issues. Numerous studies have analyzed work values to explain job satisfaction or to explore their connections with occupational rewards (Beynon and Blackburn 1972; Goldthrope et al. 1968; Hedley 1984; Kalleberg and Griffin 1978 and 1980; Kashefi 2005; Mortimer and Lorence 1979; Mottaz 1987; Neil and Snizek 1988; Ronen and Sadan 1984; Russell 1975). The central point of these studies is not to explain the source of variation in work values, but to utilize them as independent variables. Some make a typology of workers based on their work values, without providing an empirical explanation for the classification (e.g. Goldthrope 1968). Others (e.g. Kalleberg 1977) hypothesized sources of variation for work values without testing them. Some equate work values with job satisfaction, or include job satisfaction within the framework of work values (de Vaus and McAllister 1991; Hedley 1984; Ronen and Sadan 1984). Hedley (1984), for instance, attempted to ascertain whether work context or social context has the greater impact on "work orientations." Work orientations include any attitudes toward work, including job satisfaction and work values. Yet, there have been considerable research using dichotomous social class (working versus middle classes, or white versus blue-collar occupations) to explain variation in work values (Hedley 1984; Kohn 1969; Kohn and Schooler 1969 and 1983; Mortimer and Lorence 1979; Ronen and Sadan 1984--for a review consult Spenner 1988). The major concern of these studies was to explain the variation in work values between a few social classes or occupational groups based on the characteristics of those groups. Finally, and most recently several studies have been conducted to explore racial/gender differences in work values (de Vaus and McAllister 1991; Kashefi 2011; Markham et. al.1985; Neil and Snizek 1987; Rowe and Snizek

1995). These studies reveal a minimum or no significant gender or racial differences in work values *when the characteristics of jobs are kept constant*. Other studies include work values to explain the relationship between age and job satisfaction or employee commitment (Kalleberg and Loscocco 1983; Lorence 1987; Martin and Shehan 1989; Mottaz 1987). The findings indicate that work values are significant factors affecting on job satisfaction and work commitment.

While previous studies often used work values to determine job satisfaction, organizational commitment, and work involvement between gender, cohort, or racial groups, they have never exclusively analyzed the *sources of variation on work values*. The subject maintains both theoretically and substantively significance. Analysis of work values broadens our knowledge of the social psychology of work, by exploring the association between industrial, organizational, and occupational imperatives (objective work conditions) with work values (subjective response to the importance of work condition). Furthermore, variation in work values affects work expectations, which influence the willingness to invest mentally and physically in the work role.

Theoretical framework and the hypotheses: To explain the variation in work values previous studies mostly focused on occupational groups (such as white-collar versus blue-collar jobs, or managers versus workers) without paying much attention to the organizational or industrial context within which the jobs are located. Jobs are not isolated social entities. Rather, they are posited in larger social units of workplace organization and the industrial sectors which directly and/or indirectly shape the characteristics of jobs and thereby affect work values. The following theoretical contexts justify the connections between three structural imperatives (job, organization, and industry) and work values and establish the hypotheses of the research.

1. The structural imperatives of a job: Kohn and Schooler's research (1973 and 1983) demonstrated a significant pattern of effects between structural imperatives of jobs and dimensions of personality. Since then, many subsequent studies, following the occupational socialization thesis, argue "that it is the job that makes the person,

not the person that makes the job" (de Vaus and McAllister 1991: 75). Hence, similar placement of people in the job market would generate similar work values and different placement would create differences. Studies have found that employees with high status jobs tend to have higher intrinsic and lower extrinsic values than employees with lower status jobs (Mortimer and Lorence 1979). Among the dimensions of job status, Spenner (1988) argues, "component of occupational self-direction are most important, particularly substantive complexity" (1988:74). Substantive complexity reflects the degree of skills required for a job in terms of dealing with data, people, or things (Kashefi 1993; Spenner 1979). Jobs with high levels of required skills provide more opportunities for both intrinsic and extrinsic rewards, while low-skilled jobs only supply menial extrinsic rewards. Thus, the salience of extrinsic rewards, such as income and security, increases for low-skilled jobs because either workers are forced to concern themselves with their meager pay and benefits (Maslow1s hierarchy of needs) or the intrinsic rewards, such as accomplishment or advancement, are unavailable (Kanter 1977) . High-skilled jobs, on the other hand, take security and income for granted and thus the salience of intrinsic rewards increases (Anderson 1985; Kashefi2005). Therefore, variation in substantive complexity (i.e., the degree of involvement with data, people, or things) provides different opportunities within which one molds his/her pre-entry work values or raises concern about them. None of previous studies on work values has paid enough attention to substantive complexity of tasks and their effects on work values; they mostly focused on variation between white- versus blue-collar jobs.

2. The structural imperatives of the workplace organization: An individual's position within an organizational hierarchy affects his/her perceptions, values, and thoughts primarily because each level confronts him/her with various demands that he/she must attempt to meet (Hall 1994; Kalleberg and Griffin 1978 and 1980; Kashefi 2011; Wilson 2010). These demands in turn, to a significant degree, are determined by the amount of authority structured in each level of organizational hierarchy[3]. The unequal distribution of authority thus engenders various organizational demands which affect pre-entry work

values over time. Employees with higher authority, or at least the opportunity for more authority, attach higher value on advancement. The advanced employees, on the other hand, explore more opportunities for accomplishment. By contrast, organizations with restricted chances for upward mobility suppress the employees' desire for advancement and thereby limit their opportunities for accomplishment. Following this view, Kanter (1977) elaborate gender differences on work values as a consequence of adaptation to the different structural imperatives, including opportunities for advancement. Women who typically occupy jobs with lower authority levels do not highly value advancement and accomplishment to the same extent as their male counterparts, who hold relatively higher authority positions. Thus, one expects to explore a positive correlation, directly and/or indirectly, between organizational hierarchy and work values. Higher authority positions socialize job-holders to value advancement and intrinsic rewards, such as accomplishment, but to disregard extrinsic rewards, such as income and security, because jobs with higher authority are relatively secure and provide enough income relative to jobs with lower authority positions (direct effect). On the other hand, jobs with higher authority involve higher complexity and the job-holders of more complex jobs, as discussed earlier, attach relatively higher value on advancement and accomplishment (indirect effects).

3. The structural imperative of industrial sectors: Industrial shifts from an agricultural to a service economy, post-industrial societies (Bell 1974), are the striking feature of the United States production system. Industries vary in their occupational composition and in the proportions of professional versus non-professional, skilled versus unskilled, and creative versus routine jobs due to technological variation and other factors. One consequence of these industrial shifts is the development of economic sectors: core versus periphery. Writers in the tradition of dual economy (Averitt 1968; Beck et al. 1978; Tolbert et al. 1980) noted that with the development of core industries came higher payments and benefits, more job security, better job conditions, highly skilled jobs, and more opportunity for advancement which are all limited in the periphery sector (indirect effects: The economic sectors --> complexity --> work values). Beck et al. note that within the core and periphery sectors employees face "fundamentally different conditions and operate according to

fundamentally different rules" (1978:706). Such fundamentally different conditions thus provide different opportunities for the employees and socialize them differently. The existence of well-defined career paths and opportunities for advancement in the core sector socialize the employees to value advancement and accomplishment, goals that are limited in the periphery sector.[4] Therefore, employees in the core sector more likely to place higher value on advancement and accomplishment than the employees in the periphery sector since they are more accessible to them. By contrast, job-holders in the periphery sectors are more likely to value income and security because they are menial and/or access to the intrinsic rewards is limited --direct effects of the industrial sectors on work values.

Methodology: The preceding hypotheses have actually been developed on four different units of analyses. The work values are the characteristics of an individual worker; the job complexity reflects the characteristics of a job; the authority or hierarchy of employees reflect their organizational positions; and industrial sectors are measured by nature of industries. The national data within which individual, job, organization, and industry are the units of analyses are very unpopular. Fortunately, General Social Survey (GSS) have collected and ***recoded*** such data during 1980s and early 1990. The unit of analysis was originally an individual, however, the respondent's jobs, organizational position, and industrial sectors later recoded based on Dictionary of Occupational Title (DOT) and National Industrial Classification, which will be discussed in the upcoming measurement section. Furthermore, because of many missing data, four GSS samples, 1980, 1982, 1989, and 1990, are combined making an overall 6237 respondents. Finally, following the theoretical discussions, the nature of the structural independent variables,--jobs, organization, and industry-- are dynamic and consequently their effects on work values would vary over time. To address this issue, the four GSS samples are classified as panel data for the beginning and late 1980s, the findings from the beginning (1980-82) and the ending years (1989-90) compared.[5] Each survey is a representative sample of the United States people, 18 years and older (for more information on GSS, consult Davis and Smith 1992).

Measurement: Following the same measures used in previous studies, four questions measure the dependent variables, the *degree of importance* an

employee attach to income, job security, opportunity for advancement, and feeling of accomplishment. The last two variables may be categorized under the importance of intrinsic reward while the other two indicate the importance of extrinsic facets of work (Kashefi 2005 and 2011; Mottaz 1987). The paper, however, does not intend to dichotomize the importance of job rewards as intrinsic or extrinsic, since it obscures the variation within each category and assumes that the sources of variation for all extrinsic or intrinsic work values are the same.

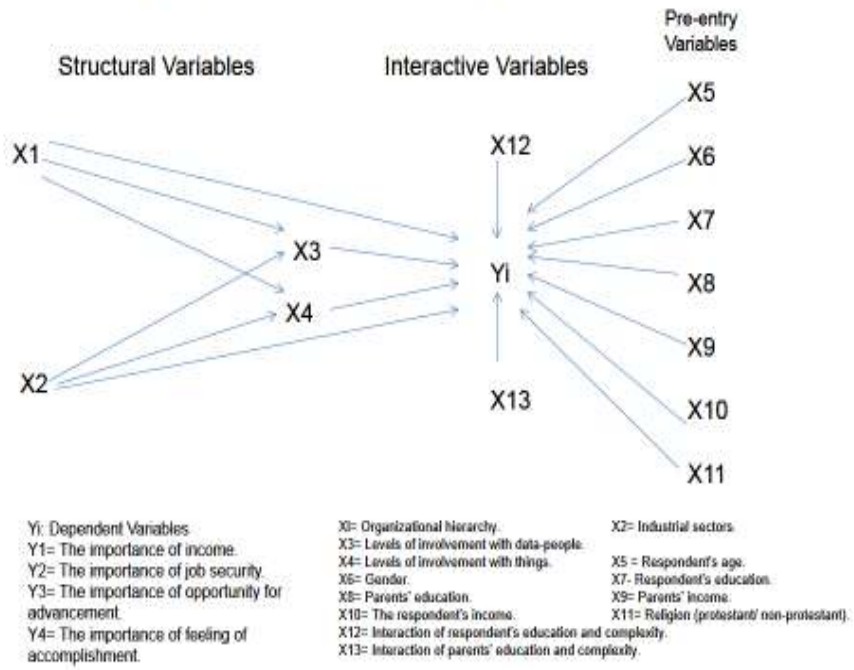
To measure the independent variables, i.e., the structural imperatives, the GSS surveys recoded the respondents' jobs based on complexity of their tasks taken from Dictionary of Occupational Title (DOT). The surveys offer three items related to the degree of involvement with data, people, and things. The degree of involvement with things is often used to measure the substantive complexity of blue-collar jobs, while the other two (the complexity of dealing with data and people) for operationalizing the substantive complexity of white-collar jobs.[6] This research follows the same method and combines the degree of involvement with data and people (hereafter, involvement with data-people) to measure complexity for white-collar jobs and the degree of involvement with things to measure complexity for blue-collar jobs (Fine and Wiley 1971; Kashefi 1993; Spenner 1979; Vails 1990).[7] The organizational imperative is measured based on the supervisory levels. Two questions (whether the respondent has a supervisor on the job and whether the respondent supervises anyone on the job) are recoded to make a three-level organizational hierarchy--the respondents who have supervisor(s) but do not supervise, the respondents who have supervisor(s) and supervise others, and the respondents who do not have supervisor(s) but they supervise other workers. Finally, the respondents' industrial category is recoded and dichotomized (core=l and periphery=0) based on Tolbert et al.'s classification for the core/periphery sectors (1980).

The first set of control variables comes from the pre-entry socialization theories. The parental income (five categories from low to high) and their education (the highest years of education either for father or mother) are included in the model to control for the effects of socioeconomic background. The respondents' gender (male=l and female=0), religion (protestant=1 and others=0), and education (number of years in formal

education) are also used to control for pre-entry socialization. The second set of control variables are not related to pre-entry socialization but to influence on work values--the respondents' income (12 categories, low to high) and age (18 to 90 years). When a job offers enough income it is expected that the salience of income, decreases while the importance of intrinsic rewards increases. Respondents' age, representing their work experience, is also included in the models. Some suggest that age reflects work experience, and experienced workers place significantly higher values on intrinsic work rewards than their younger counterparts because they have reached sufficient income and job security levels that they take them for granted.[8] On the other hand, others deny a positive relationship between age and intrinsic rewards and posit eroding intrinsic work values among older workers (Wright and Hamilton 1978). In addition to the additive effects of the independent variables, two interactive variables are included in the models--interaction between the respondents' education and their parental education with the degree of involvement with data. It is hypothesized that the respondents with higher parental education (or with higher parental education) are more likely to choose jobs with a higher level of involvement with data-people and thereby highly value intrinsic rewards. The processes presumed to underlie the observed relationships are specified with three models--the structural imperative model, a comprehensive additive model, and a final path analysis assessing the additive and interactive effects of the structural and pre-entry variables.[9] **Figure 1** displays the structural pattern specified for the final model.

Results: A preliminary examination of the means for the four dependent variables reveals significant differences among them and their changes during the 1980s. Table 1 presents the mean response for each of the four work values at the beginning and the end of the 1980s.As the top panel in Table 1 indicates, the respondents valued feeling of accomplishment higher than the other job' characteristics, followed by opportunity for advancement, income, and job security. The average importance of income and job security significantly declined (a=0.05) during the 1980s. On the other hand, the average importance of opportunity for advancement and feeling of accomplishment have increased significantly (a=0.01) during the same period.

Figure # 1: The path Linkage among the Variables



The changes in the means can be interpreted in two different ways. For example, the increasing mean for feeling of accomplishment can be a reflection of a growing opportunity to make a contribution, to be positive, and/or to use discretion in the work place (occupational socialization). Or, it can be a reaction to the declining opportunity for accomplishment in the workplace (pre-entry socialization). In this regard, Kohn and Schooler's findings are notable. They believe "the central fact of occupational life today is not the ownership of the means of production; nor is its status, income, or interpersonal relationships. Instead, it is the opportunity to use initiative, thought, and independent judgment in one's work..." (1973:116). Using initiative, thought, and independent judgment generates the feeling that one is accomplishing something in the workplace. On the other hand, lack of that opportunity may result in a growing concern about it.

Table 1:
The means for the Importance of Four Work Characteristics

	Y1	Y2	Y3	Y4
All Occupations:				
1980-82	3.48	2.45	3.36	3.84
1989-90	3.41	2.35	3.48	4.05
White-Collar Jobs:				
1980-82	3.41	2.10	3.44	4.20
1989-90	3.33	2.16	3.47	4.27
Blue-Collar Jobs:				
1980-82	3.54	2.77	3.29	3.54
1989-90	3.57	2.64	3.42	3.65
Economic Sectors (Core):				
1980-82	3.51	2.48	3.38	3.91
1989-90	3.46	2.32	3.44	4.05
Economic Sector (Periphery):				
1980-82	3.46	2.38	3.35	3.81
1989-90	3.36	2.34	3.43	4.09
Organizational Hierarchy:				
Subordinates:				
1980-82	3.54	2.47	3.20	3.75
1989-90	3.53	2.38	3.33	4.06
Supervisor & Subordinate				
1980-82	3.51	2.33	3.31	4.03
1989-90	3.46	2.22	3.48	4.10
Supervisors only:				
1980-82	3.53	1.75	3.42	4.28
1989-90	3.40	2.03	3.39	4.23

Y1: The importance of income.
Y2: The importance of job security.
Y3: The importance of opportunity for advancement.
Y4: The importance of feeling of accomplishment.

Upon further examination of the means and their differences for various occupational, industrial, and organization groups, several other substantive conclusions emerge. The second panel in Table 1 indicates the means for the four dependent variables between white-versus blue-collar jobs. It is evident from the panel that blue-collar workers value the importance of income and job security significantly more than white-collar workers (a=0.05). By contrast, white-collar workers value the importance of advancement and accomplishment significantly (a=0.01) more than blue-collar workers. This pattern remains unchanged until the end of the 1980s, except for their difference on the "importance of advancement," which becomes not significant at the end of the 1980s. This suggests that blue-collar workers o narrowed the gap between themselves and white-collar job-holders regarding the importance of advancement during the 1980. They, like their white-collar counterparts, highly value the importance of advancement. Further analysis of the means (not reported in Table 1) reveals that the variations between the subcategories of white-collar jobs (professionals, managers, clerks) are significant while the variation between the subcategories of blue-collar jobs (crafts, operatives., and laborers) are not. For instance, in 1989-90, the mean importance of income for clerical and sales workers was 0.28 points higher (significant at a=0.05) than the mean importance of income for professionals. By contrast, the mean importance of accomplishment for professionals was 0.41 points higher (significant at a=0.01) than the mean importance of accomplishment for clerical and sales workers. None of the mean differences on work values for sub categories of blue-collar jobs was significant (more discussions on multivariate analyses). Overall, as the Table shows, occupational classification is a significant structural source of variation in work values and remains significant during the 1980s.

The third panel in Table 1 indicates the mean scores for the industrial sectors. The analysis of variance shows no significant differences between the means at the beginning or at the end of the 1980s except for the importance of security and accomplishment, which also become non-significant at the end of the 1980s, suggesting a declining role of the economic sectors in explaining work values. However, we will later see that the effects of the industry sectors on work values become more significant, but indirect, when we take into consideration the other explanatory variables. Finally, the

last panel of Table 1 presents the means for the five measures of work values among three organizational levels at the beginning and at the end of the 1980s. The major characteristics of the panel are a significant difference (a=0.05) of the means for the importance of job-security in 1980-82, which remains strongly significant by the end of the 1980s, and a significant difference of the means for the importance of accomplishment in 1980-82, which dropped to a non-significant level in 1989-90. Employees at the highest levels of organizational hierarchy are less likely to concern themselves with their job security than those employees at the lowest levels of organizational hierarchy. Furthermore, in 1980-82, the employees at the highest levels of organizational hierarchy valued the importance of accomplishment significantly (a=0.01) more than did the employees at the lowest levels. However, the difference changed in such a way that in 1989-90 all employees, regardless of their organizational positions, valued feeling of accomplishment as the most important facet of their jobs.

Multivariate analyses: The primary purpose of this section is to estimate the direct and/or indirect linkage between the industrial, organizational, and occupational imperatives with work values. Direct linkages are intended to show the direct effects of organizational authority, the industrial sectors, and occupational complexities on work values. Indirect linkages, on the other hand, explore the ways in which the organizational hierarchy and the industrial sectors affect the levels of occupational complexity which, in turn, affect work values. To find the indirect linkage, two multiple regression equations are designed in which involvement with data-people and with things operate as dependent variables, while organizational hierarchy and the industrial sectors function as the independent variables.

Table 2 shows the path coefficients between organizational authority and the economic sector with substantive complexities. The linkage between authority and involvement with data-people is positive and significant while between authority and involvement with things is negative and significant. When authority level goes up, so do the levels of involvement with data-people. But by increasing the organizational authority, the degree of involvement with things declines. The findings are consistent with the theoretical expectation that high authority positions more likely concern data-people involvement as the major task for white-

collar jobs, rather than involvement with things, which is the main task for blue-collar occupations. On the other hand, the effects of the industrial sectors on both types of" occupational complexities are positive and significant, suggesting that the core sector comprises occupations with high levels of involvement with data-people and with things. The results remain the same through the end of the 1980s, with the exception that the coefficient for the industrial sectors with data-people complexity drops to a non-significant one, indicating that the role of the industrial sectors on the level of involvement with data-people declined during the 1980s.

Table 2: Path Coefficients between Substantive Complexities with Organizational Hierarchy and the Industrial Sectors

	1980-82		1989-90	
	X3	X4	X3	X4
X1	0.272**	-0.084**	0.024*	0.213**
X2	0.276**	-0.066*	0.007	0.146**
R-Squared:	0.076**	0.026**	0.074**	0.053**

*= Significant level, p ≤0.05. ** = Significant level, p ≤0.01.

X1= Organizational hierarchy.
X2= Industrial sectors.
X3= Levels of involvement with data-people
X4= Levels of involvement with things

Importance of income: Table 3 displays the path coefficients for the three models elaborated in previous sections. Organizational authority and the industrial sectors do not have significant and direct effects on the importance of income. They do, however, indirectly, through occupational complexity, significantly affect the respondents'

Table 3: Path Coefficients for the Importance of Income

	(1980-82)			(1989-90)		
	Model 1	Model 2	Model 3	Model 1	Model2	Mode3
Structural Variables:						
X1	0.022	0.041	0.041	-0.022	0.001	0.010
X2	0.006	0.029	0.010	0.032	0.013	0.060
X3	-0.106**	-0.152**	-0.180**	-0.046*	-0.023*	-0.185*
X4	0.037*	0.015	0.024*	0.072*	-0.033*	0.040*
Control Variables:						
X5	--	-0.095**	-0.099**	--	-0.119**	-0.127**
X6	--	0.030	-0.033	--	-0.004	-0.013
X7	--	-0.077**	-0.156*	--	0.139**	-0.119*
X8	--	0.027	-0.032	--	0.025	0.031
X9	--	-0.069	-0.067*	--	-0.035	-0.033
X10	--	0.019	0.017	--	0.135**	0.102*
X11	--	0.006	0.007	--	0.014	0.046
Interactive Factors:						
X12	--	--	0.190	--	--	-0.248
X13	--	--	-0.008	--	--	-0.029
R-squared:	0.013**	0.026**	0.027**	0.011**	0.045**	0.046**

*= Significant level, p ≤0.05. **= Significant level, p ≤0.01.

X1: Organizational hierarchy. X2: Industrial sectors.
X3: Job Complexity, white-collar tasks X4: Complexity, blue-collar tasks.
X5: Respondent's age X6: Gender.
X7: levels of education. X8: Parents' education.
X9: Parents' income. X10: Respondents' income.
X11: Religious (Protestant/non-Protestant).
X12: Interaction of respondents' education and complexity.
Xl3: Interaction of parents' education and complexity.

attitudes on the importance of income. The respondents who hold jobs with high levels of involvement with data-people relatively devalue income, while those with higher levels of involvement with things place higher value on income. In other words, white-collar job holders who occupy high status positions, such as professional and managerial jobs, take income for granted and do not impute high value on it. But job-holders of the lower white-collar complexity levels assign relatively higher value to income. Such a pattern does not exist among blue-collar job-holders. When the level of complexity increases for them, they impute relatively higher value on income. It may be that despite their high level of occupational complexity, they do not take income for granted. Thus, for the importance of' income, occupational complexity is the only structural imperative, among the other two, directly affecting the importance of income. On the other hand, occupational complexity itself is significantly linked to organizational authority and the industrial sectors, suggesting that authority and the industrial sectors affect the levels of occupational complexity, and the latter, in turn, significantly determines the variation in the importance of income. Age, education, and parental income are also three control variables which have significant but reverse effects on the importance of income in 1980-82. When employers get older they relatively devalue the importance of income, perhaps because they have already reached a level of income sufficient enough to take it for granted, and value the other aspects of their jobs. Furthermore, the more educated respondents attach relatively lower value to income, possibly because having more education increases the opportunity to search for jobs with higher levels of income in the labor market. Highly educated employees, therefore, take income for granted. Finally, an employee who comes from a family with a higher parental income is less likely to value the importance of income; this may be due to the fact that those who raised in an affluent family are socialized to take income for granted. Overall, the findings are consistent with the notion that when one has relatively easy access to income, or can take income for granted, one would attach relatively lower value on it. The coefficients remain the same by the end of the 1980s with a few exceptions. The coefficient for parental income changes to a non-significant one, while the effect of respondents' income on the importance of income becomes a significant one, suggesting that the respondents who

have more income are more likely to value income. This apparently contradicts the conclusion already made. However, unlike parental income, which is a pre-entry factor, the respondents' income is the outcome of the workplace. This confirms the occupational socialization view. When jobs offer higher income the job-holders are more likely to attach higher value to it.

Importance of job security: Table 4 indicates that authority and the industrial sectors both directly and indirectly affect the levels of importance for job security in 1980-82. First, high-authority job-holders are less likely to value job security compared to low-authority job-holders. Also, job-holders in the periphery sector are more likely to value job security than jobholders in the core sector. Furthermore, job-holders with high levels of involvement with data-people are less likely to value job security, while job-holders with high levels of involvement with things are more likely to value their job security. Assuming involvement with data-people as the core task for white-collar jobs and involvement with things as the main task for blue-collar jobs, one can conclude that highly skilled white-collar jobs-holders, professional and managerial, attach relatively lower value to job security than highly skilled blue-collar job-holders who have concerns with the security of their jobs. Finally, the respondents' gender, education, and their parental income are three pre-entry variables significantly affecting the importance of job security. Males are more concerned with their job security than females, perhaps because of males' traditional role as breadwinner. Educated employees are less likely to be concerned about job security, conceivably because they have better job hunting opportunities in the labor market. And, employees who are socialized in families with relatively high income are less likely to value their job security. By the end of the 1980s, a few major changes emerge in the coefficients. No longer are the industrial sectors and the levels of involvement with things significant, suggesting that the employees of both industrial sectors value the importance of job security without any significant differences--the role of industrial sectors is diminished by the end of the 1980s. This may be a result of the dynamic composition of the industrial sectors, that is, the industries are shifting between the core and the peripheral sectors.

Table 4: Path Coefficients for the Importance of Security

	(1980-82)			(1989-90		
	Model 1	Model 2	Model 3	Model 1	Model2	Mode3
Structural Variables:						
X1	-0.088**	-0.082**	-0.093**	-0.057*	-0.050*	0.068*
X2	-0.038	-0.060*	-0.063*	-0.003	-0.021	-0.036
X3	-0.204**	-0.120**	-0.276**	-0.157**	-0.117**	-0.135*
X4	0.142**	0.062*	0.068*	0.081**	-0.020	-0.002
Control Variables:						
X5	--	0.050*	0.040	--	0.039	0.035
X6	--	0.102**	0.096**	--	-0.025	-0.004
X7	--	-0.169**	-0.283**	--	-0.137**	-0.177*
X8	--	0.026	-0.094**	--	-0.048	0.063*
X9	--	-0.096**	-0.090**	--	0.056	0.035
X10	--	-0.006	-0.009	--	0.056	0.052
X11	--	-0.003	0.001	--	0.007	0.015
Interactive Factors:						
X12	--	--	0.276	--	--	0.115
X13	--	--	-0.121**	--	--	-0.075*
R-squared:						
	0.093**	0.136**	0.141**	0.044**	0.060**	0.067**

*= Significant level, p ≤0.05. **= Significant level, p ≤0.01.

X1: Organizational hierarchy. X2: Industrial sectors.
X3: Levels of complexity, white-collar tasks.
X4: Levels of complexity, blue-collar tasks.
X5: Respondent's age. X6: Gender.
X7: levels of education. X8: Parents' education.
X9: Parents' income. X10: Respondents' income.
X11: Religious (Protestant/non-Protestant).
X12: Interaction of respondent's education and complexity.
X13: Interaction of parents' education and complexity

Furthermore, the influence of involvement with things in 1989-90 becomes non-significant, indicating that all blue-collar job-holders, regardless of the degree of their task complexity, value the importance of job security, perhaps because of increasing layoffs for all blue-collar job-holders during the 1980s. This period, the 1980s, was marked by the "hegemony of conservatism," which surely affected job security and the meaning attached to it by employees. By the end of the 1980s, education still remains a significant factor, while the effect of parental income and gender dropped to non-significant levels. This suggests-that as women's roles changed in both the family and labor market they, like males, become concerned with the security of their jobs. Finally, the interaction of parental education with complexity adversely affected the importance of job security in the early 1980s and remains a significant relationship by the end of 1989-90. This does not contradict the interactive hypothesis of the study, which argues that children from families with higher levels of formal education are more likely to choose jobs with intrinsic, rather than extrinsic rewards, which includes job security, too. Overall, the findings still confirm the hypotheses drawn from the theories previously discussed. While the impact of the industrial sectors was diminished during the 1980s, still other structural imperatives, especially organizational authority and substantive complexities, remain significant factors to explain variation in the importance of job security.

Importance of Advancement: Table 5 presents the coefficients related to the importance of advancement. In the early 1980s, involvements with data-people and with things were the two structural factors affecting the importance of advancement. However, by the 1989-90 year, the effect of dealing with things drops to a non-significant one, while the organizational authority and the economic sectors display direct and positive associations with the dependent variable. This suggests that employees with more organizational authority attach higher value to the importance of advancement. Further, job-holders in the core sector more are likely to value advancement than their counterparts in the periphery sector.

Table 5: Path Coefficients for the Importance of Advancement

	1980-82			1989-90		
	Model 1	Model 2	Model 3	Model 1	Model 2	Mode3
Structural Variables:						
X1	0.006	0.041	0.039	0.027	0.055	0.079*
X2	0.031	0.044	0.041	0.063*	0.088*	0.081**
X3	0.028	0.042	0.383**	-0.028	0.029	0.117*
X4	-0.076**	-0.060*	-0.067*	0.036	-0.038	-0.054
Control Variables:						
X5	--	-0.064	-0.054	--	0.017	0.018
X6	--	-0.074*	-0.065*	--	0.013	0.010
X7	--	0.047	0.150*	--	0.006	-0.104
X8	--	-0.011	0.015	--	0.017	0.010
X9	--	0.041	0.038	--	-0.059	-0.075*
X10	--	0.007	0.010	--	-0.102*	-0.094*
X11	--	0.013	0.018	--	-0.070*	-0.046
Interactive Factors:						
X12	--	--	-0.082	--	--	-0.140
X13	--	--	0.003	--	--	-0.011
R-squared:						
	0.008*	0.020*	0.026**	0.007*	0.026*	0.028**

*= Significant level, p <0.05. **= Significant level, p <0.01.

X1: Organizational hierarchy. X2: Industrial sectors.
X3: Complexity for white-collar tasks X4: Complexity for blue-collar tasks
X5: Respondent's age. X6: Gender.
X7: levels of education. X8: Parents' education.
X9: Parents' income. X10: Respondents' income.
X11: Religious (Protestant/non-Protestant).
X12: Interaction of respondent's education and complexity.
X13: Interaction of parents' education and complexity

Finally, the employees who are dealing with high levels of involvement with data-people impute relatively higher value on the importance of advancement.

Therefore, two structural imperatives, organizational authority and the industrial sectors, both directly and indirectly, through occupational complexity, affect the attitudes of employees on the importance of advancement. In addition to the structural variables, the respondents' education and gender display significant coefficients with the importance of advancement in 1980-82. Employees with more formal education highly value the importance of advancement compared to the employees with lower levels of formal education.

This is conceivable because those employees with high levels of education have both the necessary qualifications for jobs as well as access to advancement. Further, women value advancement more than men. The relationship does not necessarily mean that men devalue advancement. Rather, females exceed their male counterparts in attaching high value to the importance of advancement, perhaps because they feel that they are denied the equal opportunities for advancement even though they are qualified. A few changes occur by the 1989-90 year. The coefficients for gender and education change to non-significant levels, while the effects of respondents' and their parental income become significant. The results indicate that the respondents' education and gender are no longer significant factors in explaining the variation in the importance of advancement. The reverse and significant coefficients between the" respondents' and their parental income with the importance of advancement are hard to justify. They suggest that employees with lower income or with lower parental income value the importance of advancement significantly more than the respondents who have more income or that come from families with higher income. Perhaps respondents with higher income had already advanced to high-status positions and thus take advancement for granted. And the children of high income families see advancement more accessible and therefore show less concern about it relative to the children of lower income families.

Importance of Achievement: Table 6 shows the path coefficients related to the importance of accomplishment. The only structural variable that directly affects the importance of accomplishment is the level of involvement with data-people, suggesting that the organizational authority and the economic sector only indirectly, through occupational complexity, affect the importance of accomplishment. Those employees who are involved with high levels of data-people attach relatively high value on 'accomplishment. In other words, higher organizational levels demand jobs with relatively higher levels of involvement

with data, which in turn affect the employees' perception of the importance of the

Table 6: Path Coefficients for the Importance of Accomplishment

	1980-82			1989-90		
	Model 1	Model 2	Model 3	Model 1	Model 2	Mode3
Structural Variables:						
X1	0.055*	0.023	0.022	-0.010	-0.029	0.023
X2	0.006	0.019	0.017	-0.044	-0.038	-0.054
X3	0.262**	0.063**	0.373**	0.148**	0.095**	0.242*
X4	-0.096**	-0.011	-0.015	-0.160**	0.067*	-0.034
Control Variables:						
X5	–	0.065*	0.073**	–	0.086**	0.097*
X6	–	-0.046	-0.040	–	0.045	0.083
X7	–	0.224**	0.356**	–	0.199**	-0.022
X8	–	0.005	0.008	–	0.013	0.069*
X9	–	0.068**	-0.065*	–	0.050	0.026
X10	–	0.011	0.009	–	-0.062	-0.043
X11	–	0.005	0.003	–	-0.003	-0.015
Interactive Factors:						
X12	–	–	0.318**	–	–	0.443**
X13	–	–	0.022	–	–	0.004
R-squared:						
	0.100**	0.134**	0.137**	0.058**	0.091*	0.095**

*= Significant level, p <0.05. ** = Significant level, p <0.01.

X1: Organizational hierarchy. X2: Industrial sectors.
X3: Levels of complexity for white-collar tasks. X4: Levels of complexity -blue-collar tasks.
X5: Respondent's age. X6: Gender.
X7: levels of education. X8: Parents' education.
X9: Parents' income X10: Respondents' income.
X11: Religious (Protestant/non-Protestant)
X12: Interaction: Respondents' education & complexity.
Xl3: Interaction of parents' education and complexity.

feeling a sense of accomplishment. The respondents who are employed in the core economic sector, generally holding jobs with a higher degree of involvement with data-people, highly value the importance of accomplishment. In addition to the structural factors, a few control variables, such as the respondents' age and their education, show significant coefficients with the importance of accomplishment in 1980-82. When employees get older, they are more likely to value the importance of accomplishment, perhaps because of taking income for granted (discussed in the importance of income) and thinking about intrinsic rewards. Furthermore, highly educated respondents attach significantly higher value to accomplishment than the ones with lower education. Finally, the interaction of the respondents' education with the levels of involvement with data indicates a positive and significant coefficient both in the 1980-82 and in the 1989-90 samples, suggesting that the employees who occupy high status white-collar jobs attach high values on accomplishment if they have higher degree of formal education. This interactive effect of involvement with data-people and education is beyond their additive impacts which had been discussed previously.

Discussion and conclusion: This research hypothesized that the structural imperatives of job, organization, and industry have partial but significant impacts on reshaping the attitudes of employees toward the importance of their jobs. The data presented here mainly supported the hypotheses (Table 7 summaries the findings). All four measures of work values disclosed direct and significant relationships with substantive complexity, especially with the degree of involvement with data-people. The linkages between organizational hierarchy and the industrial sectors on work values are mainly indirect. Only the importance of advancement displayed a significant and direct association with the industrial sector and organizational authority. The importance of job security indicated a significant and direct relationship only with organizational authority. The other facets of work showed only indirect associations with the organizational and industrial imperatives.

Table 7: Summary: Structural imperatives and Work value

	Y1	Y2	Y3	Y4
X1	I	I & D	I & D	I
X2	I	I & D	I & D	I
X3	D	D & *	D	D & *
X4	D	D	D	---

D: Direct effect. (In 1980-82 or/and in 1989-90)
I: Indirect effect. (In 1980-82 or/and in 1989-90)
*: Interactive effect. (In 1980-82 or/and in 1989-90)

Y1: The importance of income
Y2: The importance of job security
Y3: The importance of opportunity for advancement
Y4: The importance of feeling of accomplishment
X1: Organizational hierarchy
X2: The industrial sectors
X3: Levels of complexity for white-collar tasks
X4: Levels of complexity for blue-collar tasks

The pattern of structural impacts on work values revealed in this study holds its own theoretical rationale. The literature in work and occupations considers a job as the lowest structural unit through which changes in the macro socio-economic structures (such as industry, social class, and organization) affect the characteristics and attitudes of job-holders (Baron and Bialy 1982; Berg et al. 1978; Kalleberg and Griffin 1978 and 1980).or instance, Berg and his colleagues (1978) have illustrated that occupational characteristics, particularly skills, explain more of the variation in work

attitudes than do circumstantial factors, because occupational attributes are most certainly related to daily task performance. They are not contextual in the sense that the industrial or organizational imperatives of a given work setting are.

Some of the findings are consistent with previous studies. For example, feeling of accomplishment as an intrinsic reward is significantly more important for job-holders who are mainly involved with data-people than to job-holders whose main tasks are dealing with things. The jobs with high demands for involvement with data create more opportunity for accomplishment and thereby socialize the job-holders to value feeling of accomplishment. Or, employees at the highest levels of organizational hierarchy assign lower value to job security and income than do the employees at the lower levels of organization. The former conceivably take them for granted and show little concerns about their job security and income. In addition to the significance of the structural sources of inequality on work values, the research revealed some other substantive results. The significance of the factors affecting work values is not stable over time; some may lose their effect, while the others gain new deterministic roles in shaping work values. Each facet of work has its own dynamic relatively independent from the others. This is valid not only between [v] intrinsic and extrinsic rewards but also *within* each category. For instance, factors affecting the importance of income are not necessarily identical with the factors explaining the variation in the importance of job security, while both of them are classified as extrinsic rewards. Therefore, future studies preferably should avoid dichotomizing work facets as extrinsic or intrinsic and conduct new studies on other work characteristics (such as the importance of occupational safety, working independently, etc.). Although white-collar workers value intrinsic rewards more significantly than blue-collar workers, there is a significant heterogeneity within white-collar, as well as within blue-collar, workers themselves. For example, white-collar workers with the highest levels of skills value advancement and accomplishment significantly more than the white-collar employees who are involved with the lower levels of occupational complexity. Therefore, not only is the color of collar a significant factor in explaining the variation in work values, so are the type and the levels of substantive complexity, degree of involvement with data, people, and things.

Overall, the findings endorse an inclusive model of work values in which two sets of factors, pre-entry socialization and structural imperatives, shape both additively and interactively the attitudes of employees toward various facets of their work. Evidently, employees develop their work values before entering into the workplace, through family socialization and formal education. Yet, the workplace structural factors, such as the industrial sectors, organizational authority, and especially occupational substantive complexity, mold, reshape, and change the values obtained prior to the individuals' entry into the workplace.

Endnotes:

1. Disagreement exists on the **mechanism** of structural effects among the scholars who uphold the structural viewpoint. Some say that employees value what were already achieved or achievable in the workplace. Others argue that extrinsic rewards must be met before the salience of intrinsic rewards. Still others do not see a hierarchy of needs, and therefore state that meager pay and benefits can end the salience of intrinsic rewards (see Kashefi 1998).

2. The first interpretation is compatible with the proposition of the structural imperatives theories. The latter, on the other hand, is consistent with the thesis of pre-entry socialization.

3. Organizations have other characteristics too, such as organizational size, degree of automation, etc. Authority, however, reflects the degree of power attached to different job positions and affects the job-holders work values. It is not conceivable to have authority without being in an organization.

4. The industrial sectors determine the existence of dual labor market (primary versus secondary). The characteristics of primary labor market can be matched with jobs' attributes in High Performance Work Organization (HPWO). For more discussions on HPWO see Kashefi 2009 and 2011.

5. Because of missing values for the dependent and some independent variables, I decided to combine the 1980 and 1982 surveys for the beginning

years of the 1980s (no GSS sample for 1981). The 1989 and the 1990 samples were also combined for the end of the 1980s. They are the most recent samples containing all the variables needed for this study.

6. Work, definitely, has many other important characteristics. Analysis of each dimension and its importance can be subjects of new studies. The four dimensions analyzed here are among the most important ones measured in the GSS data.

7. Assuming involvement with data-people as the typical task for white-collar jobs and involvement with things the task of blue-collar jobs does not necessarily mean that each occupational group is exclusively involved with such tasks. Rather, the "Dictionary of Occupational Titles" shows that highly skilled blue-collar jobs, such as crafts, contain a higher level of involvement with things, while highly skilled white-collar jobs, such as professionals, display a higher degree of involvement with data/people rather than with things.

8. A factor analysis of these three variables shows that dealing with data and people load more than 75% of factor 1, and dealing with things loads more than 92% of factor 2. Factor 1 presumably represents the underlying task of white-collar jobs which is involvement with data or people, factor 2, on the other hand, indicates the basic skill of blue-collar jobs--involvement with things (Fine and Wiley 1971; Kashefi 1993).

9. Age can represent work experience and/or job tenure which may affect work values (Loscocco 1990; Mottaz 1987). Loscocco (1990) found a very high correlation (0.70 for males and 0.64 for females) between company tenure and the employee age.

10. There are not significant correlations between the residuals and the independent variables. This satisfies the major assumption of a path analysis (Hanushek and Jackson 1977). The path coefficients, therefore, reflect the standardized regression coefficients.

11. This coefficient may be adversely interpreted by the pre-entry socialization theory. When one values income, one would search for higher income jobs and consequently would have higher income.

References:

Anderson, L. K. 1985. "College characteristics and change in students, occupational values." *Work and Occupations*, 12:307-328.

Averitt, Robert. 1968. *The Dual Economy: The Dynamic of American Industry Structure.* New York: Horton.

Baron, James and W. Bialy. 1982. "Workers and Machines: Dimensions and determinants of technical relations in the workplace." *American Sociological Review.* 47:175-188.

Beck, E., P. Koran, and C. Tolbert. 1978. "Stratification in a Dual economy: A sectorial model of earning determination." *American Sociological Review.* 43:704-720.

Bell, Daniel. 1974. *The Coming of Post Industrialized Society. A Venture in Social Forestation.* London: Heinemann.

Betz, M. and L. O'Connell. 1989. "Work orientation of males and females: Exploring the gender socialization approach." *Sociological Inquiry.* 59:318-330.

Berg, I., M. Freedman, & M. Freeman. 1978. *Managers and Work Reform.* New York: Free Press.

Beynon, H. and R. Blackburn. 1972. *Perceptions of Work: Variation within a Factory.* Cambridge: Cambridge University Press.

Braverman, Kerry. 1974. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century.* New York: Monthly Review Press.

Brief, A.R., G.L. Rose, and R. J. Aldag. 1977. "Sex differences in performance for job attitudes revised." Journal of Applied Psychology. 62: 645-696.

Caston, J. Richard and R. Braito. (1985) "The worker-to-job 'fit' hypothesis: Some further evidence." *Work and Occupations.* Vol. 12:269-284.

Centers, R. and D. Bugental. 1966. "Intrinsic and extrinsic job motivation among different segment of the working population." *Journal of Applied Psychology.* 50:193-197.

Davis, James and Tom Smith. 1992. *The NORC General Social Survey. User's* Guide. Newbury Park: Sage Publication.

de Vaus, D. and I. McAllister. 1991 "Gender and work orientation: Values and satisfaction in Western Europe." *Work and Occupations*, 18:72-94.

Fine, S. and W. Wiley. 1971. *An Introduction to Functional Job Analyses*. Kalamazoo, MI: The W.E. Upjohn of Institute of Employment Research.

Feldberg, R. and E. Glenn. 1979 "Male and Female: Jobs versus gender models in the sociology of work." *Social Problems:* 26:525-535.

Form, William and J. Geschwender. 1962. "Social reference basis of job satisfaction: The case of manual worker." *American Sociological Review.* 27:228-237.

Goldthrope, John and D. Lockwood. 1968. *The Affluent Workers: Industrial Attitudes and Behavior.* Cambridge: Cambridge University Press.

Gruenberg, B. 1980. "The happy worker: An analysis of educational and occupational differences in determinants of job satisfaction." *American Journal of Sociology.* 86:247-71.

Halaby, Charles. 1986. "Work attachment and work place authority." *American Sociological Review.* 51:634-649.

Halaby, Charles and D. Weakleim. 1989. "Work Control and attachment." *American Journal of Sociology.* 95: 549-91.

Hall, Richard. 1994. *Sociology of Work and Occupations*. Thousand Oaks: Pine Forge press.

Hanushek, Eric and John E. Jackson. 1977. *Statistical Methods for Social*

Scientists. New York: Academic Press.

Hedley, R.A. 1984. "Work non-work contexts and orientation to work." *Work and Occupations*. Vol. 11:353-376.

Kalleberg, Arne. 1977. "Work values and Job rewards: A theory of job satisfaction." *American Sociological Review.* 42:124-143.

Kalleberg, Arne & L. Griffin. 1978. "Positional sources of inequality in job satisfaction." *Sociology of Work and Occupations*. 5:371-401.

_ _ _ _ 1980. "Class, occupation, and inequality in job reward." *American Journal of Sociology.* 85: 734-763.

Kalleberg, Arne and K. Loscocco. 1983. "Age differences in job satisfaction." *American Sociological review.* 48:78-90.

Ranter, R.M. 1977. *Men and Women of the Corporation.* New York: Basic Books.

Kashefi, Mahmoud, 2005. The relationship between work values and job rewards: Is satisfaction of extrinsic job rewards a precondition for the salience of intrinsic rewards? *International review of Modern Sociology*: Volume 31, No 2: 233-250.

----. 1993. "Occupational structure and its transformation in the United States economy, 1970-90: Examining job polarization. *Sociological Focus.* 26:277-299.

----. 1998. "Occupational socialization and work value: Examining relationship between extrinsic and intrinsic rewards and their effects on work values." An unpublished paper prepared to present in the 1999 Midwest Soc. Meeting.

----. 2011. "Structure and/or Culture: Explaining Racial Differences in Work Values," Journal of Black Studies. Feb. 22, 2011.

Kohn, Melvin. 1969. *Class and Conformity: A Study in Values.* Homewood, IL. The Dorsey Press.

Kohn, Melvin and C. Schooler. 1969. "Class, occupation, and orientation." *American Sociological Review.* 34: 659-78.

---. 1973. "Occupational experience and psychological functioning: An assessment of reciprocal effects." *American Sociological Review;* 38: 97-118.

- - - . 1983. *Work and Personality: An inquiry into the impacts of social stratification.* Norkwood Ablex.

Lorence, Jon. 1987 "Age differences in work involvement: An analysis of three explanations." *Work and Occupations,* 14:533-557.

Loscocco, A. Karyn. 1989. "The Instrumentally oriented factory worker." *Work and Occupations.* Vol.16: 3-25.

Mannheim, Bilha. 1993 "Gender and the effects of demographics, status, and work values on work centrality." *Work and Occupations,* 20: 3-32.

Markham T.W., S. South, C. Bonjean, and J. Corder. 1985 "Gender and opportunity in the federal bureaucracy." *American Journal of Sociology,* 91:129-150.

Marsden, Peter, A. Kalleberg, and C.R. Cook. 1993. Gender differences in organizational commitment." *Work and occupations.* 20:368-390.

Martin, Jack and C. Shehan. 1989. "Education and job satisfaction: The influences of gender, wage-earning status, and job values." W*ork and Occupations.* Vol. 16:184-199.

McNamee, S. and R. Vanneman. 1987 "The class structure of job rewards: A canonical analysis." *Work and Occupations,*14: 190-215.

Morrow, P. 1983. "Concept redundancy in organization research." *Academy of Management review.* 8:486-500.

Mortimer, Jeylan and J. Lorence. 1979. "Work experience and occupational socialization: A longitudinal study." *American Journal of Sociology.* 84:1361-1385.

Mortimer, Jeylan and R. Simmons. 1978. "Adult socialization." *Annual Review of Sociology.* 4:421-459.

Mottaz, J. Clifford. 1987. "Age and work satisfaction." *Work and Occupations*. 14: 387-409.Neil, C.C. and W. Snizek. 1987 "Work values, job characteristics, and gender." *Work And Occupations*.30:245-265.

- - - - . 1988 "Gender as moderator of job satisfaction: A multivariate assessment." *Work and Occupations*.15:201-219.

Ronen, Simcha and S. Sadan. 1984. "Job attitudes among different occupational status groups. *Work and Occupations.* 11: 77-97.

Rowe, R. and W. Snizek. 1995. "Gender differences in work values. In "*Work and Occupations* 22: 215-229.

Russell, K.J. 1975. "Variations in orientation to work and job Satisfaction." *Sociology of Work and Occupations.* 2:299-322.

Sewell, W.H. and R.M. Hauser. 1976 "Causes and consequences of higher education: Models of status attainment process." Pp. 9-27 in W. Sewell et al. (eds) *Schooling and Achievement* in *American Society.* New York: Academic press.

Sokoloff, N.J. 1988. "Contributions of Marxism and feminism to the sociology of women and work." Pp. 116-131, in A. H. Stromberg and S. Harkess (eds), *Women Working.* Mountain View CA: Mayfield.

Spenner, Kenneth. 1979. "Temporal changes in work content." *American*

Sociological Review. 44: 968-975.

- - - - . 1988. "Social stratification, work, & personality." *Annual Review of Sociology.* 14: 69-97.

Statham, Anne. 1987 "The gender model revised: Differences in the management styles of men and women." Sex *Roles*. 16: 409-429.

Tolbert, Charles, P., Koran, and M., Beck. 1980. "The structure of economic segmentation: A dual economy approach." *American Journal of Sociology.* 85:1095-1115.

Vallas, S. 1990. "The concept of skill: A critical review." *Work and Occupations*. 17: 379-98.

Wilson, J. (2010). More than just Race, being black and poor in the inner city. New York: W. W. Norton & Company.

Wright, J. D. & R.F. Hamilton. 1978. "Education and job attitudes among blue-collar workers." *Sociology of Work and Occupations*. 6: 59-83