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HOURS OF WORK SATISFACTION  
AS A JOB SCOPE -  
EMPLOYEE RESPONSE MODERATOR

by

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## Abstract

Conceptual and empirical evidence has been offered suggesting that employee satisfaction with the work environment is a necessary precondition for employee responsiveness to job enlargement and job enrichment. A constructive replication employing four independent samples of the four studies focusing on this relationship is presented. Empirical evidence does not support the moderating role of context satisfaction as has been found in previous empirical investigations.

## Hours of Work Satisfaction as a Job Scope - Employee Response Moderator

Herzberg's (1966) two factor theory of motivation suggests that if employees are dissatisfied with their work environment (e.g., dissatisfied with context factors like company policy and practice, supervision, coworkers, and monetary rewards) it is unlikely that they will be responsive to job enlargement or job enrichment efforts. However, once the job environment is reasonably free from such causes of dissatisfaction then managers can focus on the manipulation of job content factors with expectations of positive results. In essence the Herzberg theory suggests that satisfaction with the work context is a necessary but not sufficient condition for employee responsiveness (attitudinally, motivationally, and behaviorally) to enlarged and enriched job designs.

To date only a limited number of investigations have empirically examined this position. The results remain inconclusive. Through a subgroup analytic procedures Oldham (1976) provided directional support suggesting that if employees are dissatisfied with their supervision and/or coworkers (two job environment/context factors) this dissatisfaction will weaken the positive relationship between job characteristics and employee job facet satisfaction. Thus, individuals perceiving their jobs as high on the five job characteristics of variety, autonomy, identity, significance, and feedback experienced high internal work motivation when they were satisfied with supervision and their coworkers.

Along similar lines of inquiry Oldham, Hackman and Pearce (1976) focused on the moderating role of employee satisfaction with work context (i.e., satisfaction with pay, job security, coworkers, and supervision) in the relationship between job scope and employee affective responses. Like the Oldham study, Oldham et. al. found support for the moderating role of employee satisfaction

with the work context. Thus, we witness initial support for the position taken by Herzberg identifying the preconditions for a successful job enlargement-job enrichment experiment.

A third investigation of this moderating effect of work context satisfaction (social, supervisory, pay, and security) on the job scope-employee affective response relationship was reported by Champoux (1978). Champoux's data show that two of the four (i.e., the two interpersonal satisfaction variables) context satisfaction variables significantly interact with job scope. The nature of this interaction, however, suggests that employees turn to the job itself for their satisfaction in the face of dissatisfaction with the interpersonal context of their jobs. That is, the job itself becomes less important as a source of satisfaction when the interpersonal context is positive. The results of this investigation are generally opposite of those reported by Oldham and his colleagues (Oldham, 1976; Oldham et al., 1976).

Abdel-Halim (1979) performed a constructive replication of the previous research employing both subgroup and moderated regression analyses. A significant increase in the amount of explained criterion variance (intrinsic satisfaction and job involvement) was found for employee affective orientation to the contextual variables of supervisory satisfaction and co-worker satisfaction. The results reported once again are opposite of those predicted by Oldham (1976). There was strong intrinsic satisfaction and job involvement under high scope jobs when the employee had low levels of supervisory and co-worker satisfaction.

The four investigations reported above support the moderating role of work context satisfaction in the job design-employee affective response relationship. The direction of the moderating role, however, is not consistent. In the Oldham and Oldham et al., investigations the Herzberg position is supported. The

Abdel-Halim and Champoux investigations suggest that a dissatisfying work environment can be partially compensated for by providing more of the five characteristics of an enlarged and enriched job.

The purpose of this paper is twofold. First, a brief conceptual explanation for the inconsistent observations noted above will be offered. Second, a further test of the moderating role of work context will be made couched within the framework of flexible working hour systems with hours of work satisfaction serving as the moderating contextual variable.

In the stress models presented by Dunham (1980) and Ivancevich and Matteson (1980) job dissatisfaction is treated as a response to stress. A dynamic model would suggest that this dissatisfaction may serve to amplify the previously experienced stress. Subsequently, dissatisfaction becomes a stressor. According to McGrath (1976), either of two potential situations may arise when a non-task-based stressor is operating. On the one hand, the stressor may lead the employees to focus their attention and effort on the task so as to absorb/reduce the otherwise stressful effects. As a consequence of this reduction one would predict that the employees will have attitudinal and behavioral responses that are strongly associated with the characteristics of the job per se. On the other hand, the stressor condition may operate so as to distract the focal person from the task and thus its presence is likely to decrease the strength of association between job characteristics and employee responses. Thus, performing a task while under non-task-based stress may have two quite different results.

A critical question focuses on the different conditions under which distraction or absorption occur. Two keys to understanding is dual response phenomena can be found in the concepts of instrumentality and perceptual proximity. Given the hedonistic nature of people it is expected that there will be a

move away from the stressor when there are more positive alternatives to choose from. When absorption in the task is perceived as instrumental in the reduction of (or insulation from) the stressor we might predict a strong positive job scope-employee response relationship under conditions of work context dissatisfaction. This instrumental response (absorption) serves to explain the observations made by Abdel-Halim and Champoux. When absorption in the task is not instrumental in the removal of the stressor we may witness a weak job scope-employee response relationship as observed by Oldham and his associates.

The concept of perceptual grouping through the principle of proximity provides an explanation of one of the conditions under which absorption will be perceived as instrumental in the removal of a stressor. Stimuli in one's perceptual space vary in their proximity to one another. Certain stimuli will be more strongly associated with one another than other stimuli. For example, employees may see job content factors as more strongly associated with characteristics of the technology with which their job interfaces than with the structural characteristics of the department in which the job and technology are housed (Pierce, 1980). As a consequence of this differential in perceptual grouping, absorption in the task may be less instrumental in the removal of the influence stemming from the technology than from the structural characteristics of the social system. In essence, this suggests that the ability to absorb and/or the likelihood of distraction will vary across contextual factors, in part as a function of their position in the employee's perceptual space. Other individual and situational factors (e.g., past experiences in similar situations, attractiveness of outcomes, belief in internal vs. external control, communication from others, the actual situation, Cf., Lawler, 1973, p. 58) may also play a role influencing this instrumentality perception.

The present investigation attempts to serve as a constructive replication of the previous research. Within the context of work scheduling the moderating role of hours of work satisfaction will be tested as a distractor to enlarged and enriched job conditions. It will be argued that employee satisfaction with their hours of work will moderate the job scope-employee affective response relationship. Employees who have an enriched job may eventually come to see their jobs as less satisfying if those jobs are embedded in a set of hours and a pattern of hours that do not satisfy the employees' important psychological and physiological needs. That is, employees who become victims to the routines of coming to work at a static set of hours will eventually experience an attenuation in the satisfaction that otherwise stems from an enlarged and enriched job.

It is argued that there is likely to be a perceived closeness between job and hours of work stimuli. Because of the strength of this association the distraction phenomenon is likely to occur. This association may stem from two forces. First, if the hours of work are not in harmony with the employee's circadian rhythms the employee will not be able to respond fully (psychologically and/or behaviorally) to the job's demands. Second, if the hours of work clash with personal time demands the employee is likely to be distracted from job characteristics. Employees cannot easily absorb themselves in the job when dysfunctional consequences arise from a lack of match between the work schedule and their circadian rhythms and/or when job demands compete with demands on their time stemming from personal matters. Thus, dissatisfaction with hours of work is likely to distract the employee from the otherwise positive consequences stemming from enriched jobs.

Hackman and Lawler (1971) and Hackman and Oldham (1976) have suggested that employees working on complex jobs will be more job involved, will have higher

intrinsic work motivation, and will be more job satisfied than those employees experiencing simple and routine job designs. These criterion variables are met because complex jobs are more likely to contribute to the creation of three critical psychological states (i.e., experienced meaningfulness of work, experienced responsibility for work outcomes, and knowledge of results) which are necessary antecedents for the employee reactions of job involvement, intrinsic work motivation, and job satisfaction. Following the lead of Oldham (1976) it is proposed here that there will be a strong positive association between job characteristics and job involvement, intrinsic work motivation, and general job satisfaction for those employees who are satisfied with the hours that they work. A number of other criterion variables (affective and behavioral) will also be examined.

## Method

### Sample

This investigation involves an examination of the job scope-employee response relationship, with employee hours-of-work satisfaction serving as a moderating variable. In order to test this moderating role of employee satisfaction with a work context variable, data was collected from four organizations operating in the insurance industry. The proposed moderating variable relationship will be examined across four independent samples following a duplicative replication design.

Sample One consists of 54 employees working in two departments (n = 21 word processing and n = 33 records maintenance employees) within a midwest-based multiple line insurance company. The two departments experience a flexible form of work scheduling. Four times a year employees select their preferred starting time between the hours of 7 and 9:00 a.m. Sample Two consists of 41 word



processing and records maintenance employees. The 19 word processing employees work under a staggered start work schedule where four times a year they are permitted to select a new starting time between the hours of 7 and 9:00 a.m. segmented in 15 minute intervals. The 22 records maintenance employees select their staggered starting time in 30 minute intervals also between the hours of 7 and 9:00 a.m. Sample Three consists of 62 ( $n = 29$  word processing and  $n = 33$  records maintenance) employees. The word processing employees work under a flexitime system. These employees have a daily choice defining their starting time between the hours of 7 and 9:30 a.m., at noon the employees can exercise a daily lunch period choice of 30, 45, or 60 minutes, and in the afternoon the employees can choose to skip their afternoon break period to further define the time of their daily work period. The records maintenance employees in this organization work a daily fixed hour work week. Sample Four consists of 39 records ( $n = 14$ ) and word processing ( $n = 25$ ) personnel. This group of employees start their daily work schedule between the hours of 6:30 and 9:00 a.m., coupled with the individual opportunity to change the chosen schedule every two weeks.

In terms of frequency of work schedule changes the samples range from no changes to 260 starting time changes (every work day) possible on a yearly basis. In terms of the total amount of discretionary time available to the employee on a yearly basis the samples range from none to 32,500 minutes (see Pierce & Newstrom, 1981 for more details).

The samples were examined in terms of a number of demographic and personality variables. In essence the groups did not differ in terms of their tolerance for ambiguity, need for autonomy, growth need strength, sex, and education. Industry, organization type (multiple line insurance), and basic organizational core technology were controlled through the design of the investigation.

## Data Collection and Variables

Hackman and Oldham's (1975) Job Diagnostic Survey (JDS) was employed to measure five job characteristics (variety, autonomy, identity, significance, and feedback). Based upon observations made by Pierce and Dunham (1976) regarding various combinatory models and the dimensionality of the JDS a simple additive model was employed to define job scope. See Table 1 for the descriptive statistics for the major variables.

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 Insert Table 1 about here  
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Job involvement derives from five items from the Lodahl and Kejner (1965) scale. The short form of the Minnesota Satisfaction Questionnaire (Weiss, England, Dawis & Lofquist, 1967) was employed to measure general job satisfaction. Hours of work satisfaction, life satisfaction, and leisure time satisfaction was measured by Kunin's (1955) Faces scale. Kind of work satisfaction was measured by the Index of Organizational Reactions (Smith, 1976). Effort and productivity derive from the supervisor's appraisal of performance and effort. Employee absenteeism was measured in terms of total time lost for a common three-month period and the data were derived from company records. Hackman and Oldham's (1975) JDS was also employed to measure internal work motivation. Patchen's (1979) seven item scale was employed to measure self report symptoms of psychological and physical stress. Organizational commitment was measured by Porter, Steers, Mowday, and Boulain's (1974) 15 item scale.

## Analysis

Moderated multiple regression (Champoux, 1978) was employed within each of the four samples. First, each criterion variable was regressed on job scope and

hours of work satisfaction. Second, a regression equation employing job scope, hours of work satisfaction, and the job scope X hours of work satisfaction interaction term was employed. The moderating role of hours of work satisfaction is determined by an examination of the change in the  $R^2$  (coefficient of determination) values. The significant change in the  $R^2$  values was examined by a technique described by Cohen (1970).

### Results

Twelve criterion variables, across four independent samples, were regressed on job scope, hours of work satisfaction, and the interaction term for these two predictor variables through a moderated regression technique. The addition of the interaction term produced a significant increase (see Table 2) in the criterion variance accounted for in six of 48 relationships. That is, in six

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Insert Table 2 about here  
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relationships there is evidence to support a moderating role for hours of work satisfaction in the job scope-employee response relationship.

This moderating effect was found for job involvement in one (Sample One) of the four samples, for general job satisfaction in one (Sample Two) of the four samples, for life satisfaction in Sample Two, and for productivity in three (Samples One, Two, and Four) of the four samples. No significant interaction term was identified for: leisure time and kind of work satisfaction; internal work motivation and effort; organizational commitment; experienced symptoms of physical and psychological stress; and for the two behavioral variables - performance and productivity.

## Discussion

Conceptually, Herzberg argued that employees who are dissatisfied with facets of their work environment will not be receptive/responsive to job enlargement or enrichment efforts. Job context satisfaction was seen as a necessary precondition for job content satisfaction. The thrust of this argument can be summarized in terms of a "distraction phenomenon." That is, a dissatisfying work environment distracts the employee from jobs that are broad in scope.

Four studies were found that directly tested the moderating role of work context satisfaction in the job scope-employee response relationship. In each case a significant moderating effect was found; however, the direction of the moderating effect varied across studies. In two studies the "distraction phenomenon" appears to have been supported. The results from two other investigations suggest the operation of an "absorption phenomenon." That is, some employees experiencing dissatisfaction with facets of their work environment appear to turn to the job for positive work experiences so as to block out the dissatisfaction stemming from contextual factors.

These two responses, represented by the "distraction-absorption phenomena" were explained in terms of instrumentality. That is, it was suggested that absorption is likely to occur when becoming job involved is perceived as instrumental in reducing the stress and/or dissatisfaction associated with an unpleasant work context. Distraction is likely to occur when absorption is not perceived as instrumental in the removal of the stressor and when the contextual factor is close to the job factors in one's perceptual field.

Hours of work satisfaction was hypothesized to moderate the job scope-employee job involvement, internal work motivation, job satisfaction relationship. Using the concept of perceptual proximity to link job and hours of

work stimuli, it was hypothesized that the distraction phenomenon will occur when employees are dissatisfied with their hours of work. That is, absorption will not be perceived as instrumental in the removal of stress associated with hours of work dissatisfaction due to the extremely close perceptual proximity between these two sources of stimuli.

A four sample duplicative replication study was undertaken to test the moderating variable relationship. Only six out of 48 possible relationships emerged as statistically significant moderators. The significant relationships were for job scope-job involvement in Sample One, for job scope-job satisfaction in Sample Two, for life satisfaction in Sample Two, and for performance in three of the four samples. Thus, none of the 12 criterion variables emerged with a consistently moderated job scope-employee response relationship. In total, all of the significant moderated relationships could be attributed to a chance occurrence. Performance is the only possible exception. The job scope-performance relationship was significantly moderated in three out of four samples. These empirical observations lead to the unequivocal rejection of the moderating variable hypothesis.

The most revealing conclusion stemming from this line of inquiry is that work context satisfaction is not a universally consistent moderator of the job scope-employee response relationship. The results of the Oldham; Oldham, Hackman and Pearce; Champoux; and Abdel-Halim investigations may be sample and/or variable specific. It is clear that arguments in support of Herzberg's hypotheses cannot be offered without being qualified as either sample and/or contextual variable specific.

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Table 1

## Descriptive Statistics

Variables	Sample 1		Sample 2		Sample 3		Sample 4	
	M	St. Dev.	M	St. Dev.	M	St. Dev.	M	St. Dev.
Job Scope	73.67	12.14	74.51	14.35	64.46	15.62	68.45	14.18
Hours Wk Satisfaction	6.08	.98	5.89	1.31	5.02	1.43	5.50	1.09
Life Satisfaction	5.57	1.29	5.32	1.70	5.13	1.58	5.67	1.54
Leisure Satisfaction	5.43	1.70	6.11	1.10	5.17	1.66	5.53	1.68
Kind Work Satisfaction	20.92	4.79	21.70	5.56	18.69	6.13	20.17	6.24
General Job Satisfaction	71.10	10.13	68.86	13.65	64.02	12.01	67.70	13.26
Job Involvement	12.47	3.73	12.22	3.55	12.39	3.75	12.47	3.16
Organizational Commitment	71.63	11.97	64.32	19.13	63.28	15.83	70.70	14.69
Effort	5.22	1.23	5.78	1.11	5.43	1.25	4.73	1.64
Internal Work Motivation	34.29	5.28	33.27	6.50	33.00	5.30	31.90	5.63
Physical Stress	10.20	4.47	9.70	4.70	10.94	4.85	9.83	5.16
Psychological Stress	8.37	3.04	8.38	3.42	7.87	2.84	8.27	3.26
Productivity	6.92	1.67	8.11	1.13	7.89	1.24	6.97	1.79
Absenteeism	1.16	1.95	2.38	7.25	6.91	8.49	1.40	2.25



Table 2  
Moderated Regression

CRITERION VARIABLES	Sample											
	1			2			3			4		
	$R_1^2$	$R_2^2$	$\Delta R^2$ F Sig	$R_1^2$	$R_2^2$	$\Delta R^2$ F Sig	$R_1^2$	$R_2^2$	$\Delta R^2$ F Sig	$R_1^2$	$R_2^2$	$\Delta R^2$ F Sig
Job Involvement	.077	.167	5.4*	.394	.413	1.20	.173	.191	1.29	.240	.240	0
General Satisfaction	.135	.141	.349	.527	.602	6.97*	.463	.464	.108	.456	.457	.065
Internal Work Motivation	.139	.148	.528	.299	.304	.27	.211	.211	0	.344	.344	0
Kind of Work Satisfaction	.431	.441	.894	.756	.757	.152	.419	.420	.104	.512	.513	.072
Life Satisfaction	.004	.023	.972	.200	.338	7.71*	.155	.157	.138	.355	.355	0
Leisure Satisfaction	.046	.048	.105	.005	.095	3.68	.058	.066	.497	.077	.080	.114
Organization Commitment	.132	.133	.058	.565	.585	1.78	.204	.206	.146	.344	.344	0
Effort	.083	.140	3.31	.310	.362	3.02	.018	.028	.597	.006	.048	1.54
Physical Stress	.077	.079	.109	.029	.058	1.14	.032	.048	.975	.067	.120	2.11
Psychological Stress	.089	.105	.894	.193	.238	2.19	.076	.085	.57	.099	.120	.835
Productivity	.010	.134	7.16*	.264	.406	8.85*	.048	.068	1.25	.139	.241	4.70*
Absenteeism	.074	.079	.271	.044	.055	.43	.018	.025	.42	.017	.116	3.92

\*  $p \leq .05$

$R_1^2$  Regression coefficient of determination for job scope and hours of work satisfaction.

$R_2^2$  Regression coefficient of determination for job scope, hours of work satisfaction, and job scope-hours of work satisfaction interaction.