

MICROCOPY RESOLUTION TEST CHART
NBS 1963-A

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ADA 112167

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TR-ONR-1-1-10	2. GOVT ACCESSION NO. AD-A12167	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) JOB CONTEXT SATISFACTION AND JOB DESIGN: A CONCEPTUAL PERSPECTIVE	5. TYPE OF REPORT & PERIOD COVERED Interim	6. PERFORMING ORG. REPORT NUMBER TR-ONR-1-1-10
		8. CONTRACT OR GRANT NUMBER(s) N00014-79-C-0750
7. AUTHOR(s) Randall B. Dunham, Jon L. Pierce, and John W. Newstrom (second and third authors: University of Minnesota-Duluth)	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR 170-892	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Graduate School of Business University of Wisconsin Madison, Wisconsin 53706	11. CONTROLLING OFFICE NAME AND ADDRESS Organizational Effectiveness Research Programs Office of Naval Research (Code 452) Arlington, Virginia 22217	12. REPORT DATE March 5, 1982
	14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	13. NUMBER OF PAGES 33
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release: distribution unlimited.	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) job characteristics, job scope, employee reactions, context satisfaction, job context factors		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Recent empirical inquiry focusing on the moderating effect of job context satisfaction on the job content → worker response relationship has produced seemingly contradictory findings. Three types of explanations are explored: chance occurrence, sample distribution artifacts, and a series of alternative conceptual explanations. The first reconceptualization suggests that context satisfaction level influences higher level needs. A second reconceptualization involves absorption/distraction as the process which explains the role of context satisfaction. Six possible determinants of absorption/distraction		

DTIC
EXCLUDED
MAR 19 1982
H

DTIC FILE COPY

DD FORM 1473 1 JAN 73

EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-LF-014-6601

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

20. levels are discussed. Testable hypotheses for each idea developed are presented.

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist _____	
A	



JOB CONTEXT SATISFACTION AND JOB DESIGN:

A CONCEPTUAL PERSPECTIVE

Randall B. Dunham
University of Wisconsin

Jon L. Pierce
University of Minnesota-Duluth

John W. Newstrom
University of Minnesota-Duluth

ONR Technical Report Number 1-1-10

March, 1982

Reproduction in whole or in part is permitted for any purpose of the United States Government. This report was sponsored in part by the Organizational Effectiveness Research Program, Office of Naval Research (Code 452), under Contract No. N00014-79-C-0750, NR 170-892.

APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED.

ABSTRACT

Recent empirical inquiry focusing on the moderating effect of job context satisfaction on the job content + worker response relationship has produced seemingly contradictory findings. Three types of explanations are explored: chance occurrence; sample distribution artifacts; and a series of alternative conceptual explanations. The first reconceptualization suggests that context satisfaction level influences higher level needs. A second reconceptualization involves absorption/distraction as the process which explains the role of context satisfaction. Six possible determinants of absorption/distraction levels are discussed. Testable hypotheses for each idea developed are presented.

JOB CONTEXT SATISFACTION AND JOB DESIGN:

A CONCEPTUAL PERSPECTIVE

During the last decade there has been considerable interest in identifying those factors which influence the strength of the relationship between job characteristics and employee reactions to these job factors. Most attention has been directed toward exploring characteristics of workers (e.g., urban versus rural background, growth need strength) which influence the manner in which they react to a set of job characteristics. More recently, however, empirical inquiry has been directed toward exploring the role of satisfaction with job context factors as "moderators" of job characteristics + worker reaction relationships. Several recent empirical studies have directly addressed this latter issue (Oldham, 1976; Oldham, Hackman, & Pearce, 1976; Abdel-Halim, 1979; Orpen, 1979; Katerberg, Hom, & Hulin, 1979; and Champoux, 1981). Each of the studies focused on the general question "what effect does the level of satisfaction with context factors have on the relationship between job characteristics and employee reactions to the job?"

The first study to directly address the job context moderating effect was conducted by Oldham (1976). Using a sub-group analytical procedure, Oldham identified the moderating effect of two contextual factors (satisfaction with supervision and co-workers). The findings revealed that the strength of the job characteristics (i.e., autonomy and significance) + job satisfaction relationship was weaker for those employees with lower levels of satisfaction with supervision and co-workers than for workers with higher satisfaction in these context areas.

Oldham, Hackman, and Pearce (1976) examined satisfaction with pay, job security, co-workers, and supervision as possible moderators of the job characteristics → satisfaction relationship. Their findings provided modest support for a moderating effect due to levels of satisfaction with co-workers and pay, such that the job characteristics → worker reaction relationship was weaker for employees with lower levels of satisfaction with these contextual factors. In this same study, a moderating effect of growth need strength was also identified. Although the joint moderating effects of growth need strength and context satisfaction were explored, it is not possible from the analyses reported to determine the degree to which the moderating effects of context satisfaction and growth need strength were independent.

In a study by Orpen (1979), measures of satisfaction with security, pay, supervision, and co-workers were combined to form an overall measure of context satisfaction. Based upon this overall context satisfaction scale, Orpen's total sample was split into two sub-groups of 18 each. Examination was then made of the relationship between each of five perceived job characteristics (and a combination of the five job characteristics) with job satisfaction, job involvement, internal motivation, and performance. No consistent differences were found between sub-groups for performance. For the attitudinal variables, however, stronger relationships were found in 14 of 18 cases under conditions of high context satisfaction. For four of these sub-group comparisons, there were significant differences in the size of correlations between the two sub-groups. Thus, support (albeit modest) was provided for the findings of Oldham and associates.

Satisfaction with pay, co-workers, and supervision (separately and in a summated model) was tested as a moderator of the job complexity → employee response relationship in a study of part-time workers by Katerberg, Hom, and Hulin (1979). Employing moderated regression, a statistically significant moderating effect was found for five of 20 tests. However, even the five statistically significant effects were of a very minor magnitude (the largest effect produced was a change in R from .47 to .49). Examination of the results indicated that most of this effect was produced by pay satisfaction. Sub-group analyses were also performed. Of the five cases in which a statistically significant interaction between job scope and context satisfaction was found in the moderated regression, the only effect which was identified as significant, suggested a stronger job scope → organizational commitment relationship for those more satisfied with their pay. In sum, Katerberg et al's test of moderating effects suggest that employee reactions were not always stronger in the high versus low groups, few significant moderating effects were uncovered, and the magnitude of moderating effects which were identified were extremely small.

Champoux (1981) presented findings from four independent studies. Upon first examination, some of Champoux's findings appear directly contradictory to those of the preceding studies. Champoux explored the potential moderating role of the same four contextual factors examined by Oldham et al. He found a moderating effect for supervision satisfaction in one of the four samples and for co-worker satisfaction in another sample. Champoux's findings indicated a stronger job characteristics → employee reaction (i.e., growth satisfaction) relationship under conditions of lower satisfaction with the job context factors than under conditions of higher satisfaction with these factors. Champoux also explored

the joint moderating effect of context satisfaction and growth need strength. Unfortunately, it was not possible to determine from the analyses reported if the two moderating effects were independent.

Using both sub-group and moderated regression analyses, Abdel-Halim (1979) performed a study similar to the Champoux study. The results of this study indicated that job scope was more important for employees who have lower satisfaction with supervision and co-workers than for workers who have higher satisfaction levels for these context factors (i.e., the slope of the job scope \rightarrow worker response relationship is steeper under low context satisfaction conditions).

The six investigations discussed here support the possibility of a moderating role of work context satisfaction in the job scope \rightarrow employee affective response relationship. The nature of the moderating role, however, does not appear consistent. The purpose of the present paper is two-fold. First, a set of alternative conceptual explanations for the inconsistent observations noted above will be offered. Second, a set of researchable hypotheses will be offered which, when tested, will serve to conceptually advance our understanding of the moderating role of work context satisfaction.

The findings of the preceding series of studies appear contradictory. There are, however, at least three types of explanations for these findings: (1) the findings are chance observations which are truly contradictory and not systematically explainable; (2) the findings are not really contradictory, but merely appear to be contradictory due to artifacts of the sample distributions for the

"moderating" variables; and (3) the findings are complex, but systematically explainable through the use of alternative conceptualizations which involve a third variable (or variables) which determine the direction of the moderating effect.

CHANCE OBSERVATIONS

Given that only a very small number of investigations have addressed the context satisfaction moderating issue, it is possible that the observed moderating effects were simply chance occurrences. It would be expected that the direction of a chance moderating effect would be in one direction half of the time and in the other direction the other half of the time (as was roughly the case in the six studies reviewed). This explanation may be particularly reasonable given the inconsistencies between studies, such as the fact that only some of the contextual factors examined produced moderating effects and the fact that different criterion variables were involved. To refute this explanation of the observed moderating effects will require either a series of additional studies which consistently support a moderating effect in one direction or the other, or a documentation of the process by which the direction of the moderating effect is systematically determined.

SAMPLE DISTRIBUTION ARTIFACTS

Oldham (1976), Oldham et al., (1976), Orpen (1979), Katerberg et al., (1979), Champoux (1981), and Abdel-Halim (1979) each examined samples which had a range of context satisfaction from low to high relative to a specific sample distribution. Examination of the results of these studies appears inconsistent since in one set of studies the relatively low context satisfied workers exhibited

stronger job characteristics + response relationships while in the remaining studies the relatively high context satisfied workers exhibited the stronger job + response relationship. However, since the degree of context satisfaction was always expressed in terms relative to a particular sample distribution, it is not appropriate to directly compare the various studies unless the actual levels of context satisfaction are compared. It makes little sense to compare the relative level of context satisfaction within one sample to the relative context satisfaction level within a different sample. Unless the two samples have the same overall distributions, such a comparison would be inappropriate. Therefore, unless the distributions from the six studies can be directly compared, it is not possible to determine whether or not the results of these studies are consistent.

We attempted to compare the distributions from the set of empirical studies just reviewed and found that adequate comparisons were not possible. Orpen (1979) used satisfaction roles "specially designed for the . . . study." Abdel-Halim (1979) used a different instrument to measure context satisfaction than did the other researchers. Oldham (1976) and Katerberg et al., (1979) did not report sample means or standard deviations. Champoux (1981) reported means and standard deviations, but only for those variables involved in significant moderating effects (and only for those samples where the moderating effects occurred). In the isolated cases where comparisons were possible, differences in distributions were evident. To provide one simple example of how an appropriate comparison of the several studies might reveal that their findings are in fact consistent, consider the following possibility:

1. The mean context satisfaction level for the "low" group in Study A is 2.3 and for the "high" group is 3.1. In this study, the "low" group has weak job characteristics + worker response relationship and the "high" group has a strong job + response relationship.

2. The mean context satisfaction level for the "low" group in Study B is 3.1 and for the "high" group is 3.9. In this study, the "low" group has a strong job + response relationship while the "high" group has a weak job + response relationship. Comparison of the actual levels of context satisfaction from the two hypothetical samples in the preceding examples would reveal consistency not inconsistency in findings and lead to a very different conclusion than that initially suggested (i.e., a curvilinear effect).

ALTERNATIVE CONCEPTUALIZATIONS

The third type of explanation for the findings to date will be explored in the remainder of this paper and involves reference to a third variable (or variables) to determine the direction of the moderating effect. It will be suggested that the process by which the moderating effect occurs explains the differences in findings noted in the previously reviewed studies. We will detail several of the most likely variables and processes which might be involved in this type of effect.

A Re-examination of Herzberg

Each of the studies reviewed in this paper appears to have been at least in part encouraged by Herzberg's two factor theory. As part of his theory, Herzberg (1966) suggested that dissatisfaction with the work environment (e.g., with

supervision, co-workers, company policies and practices, and monetary rewards) would make it unlikely that workers would be responsive to job characteristics. However, Herzberg argued that, once the environment was reasonably free from these contextual sources of dissatisfaction, workers should become responsive to job characteristics. Herzberg set forth a very straightforward theory that specified that job content factors would simply not be very salient to those workers for whom context factors were not yet satisfied. It would be consistent with Herzberg's theory to suggest that the strength of higher order needs is lower for those workers for whom lower order needs (hygiene or context factors) have not yet been met than for those workers for whom these needs have been met.²

This interpretation of Herzberg's ideas suggests that the process by which context satisfaction moderates the job characteristics → worker response relationship involves the intervening variable growth need strength (see Figure 1). Thus, context satisfaction is not a "new" moderating effect as has been suggested, instead context satisfaction is simply one factor which influences the true moderator—growth need strength (a moderator which has been thoroughly researched). If this suggestion is supported, context satisfaction should not be viewed as a direct moderator, but rather as just one of many antecedents of the true moderator. Context satisfaction can have a consistent and systematic effect on growth need strength, but appear to have an inconsistent moderating effect on the job → response relationship because other factors also effect the growth need strength level often "overpowering" the effect of context satisfaction.

Insert Figure 1 About Here

Hypothesis 1: The observed moderating effect of context satisfaction on the job characteristics → worker response relationship is due to the fact that context satisfaction impacts upon growth need strength which, in turn, moderates the relationship. Context satisfaction will produce no empirical moderating effect above and beyond that explainable by growth need strength.

Test of Hypothesis 1: This hypothesis can be tested by measuring context satisfaction, growth need strength, job characteristics, and employee responses (e.g., work satisfaction, internal motivation). The relationship between the job characteristics and the employee responses would first be established using a regression analysis (see Champoux and Peters, 1980, for a thorough discussion of the appropriate analytical design for such an analysis). Next, the moderating effect of context satisfaction would be established using moderated regression. Next, the variance in context satisfaction explainable by growth need strength (an intervening variable in the moderating process) would be statistically removed or partialled out. The residual context satisfaction measure would then be used to test for a moderating effect using moderated regression. If no moderating effect remained, then the entire moderating effect which appeared to be due to context satisfaction was empirically explainable by use of the growth need construct as shown in Figure 1. If the size of the original context satisfaction moderating effect was not significantly reduced, then the entire moderating effect which was observed for context satisfaction is independent of growth need strength levels. If the size of the original moderating effect is reduced from its original level, but not completely removed by the partialling out of growth need level, then the moderating effect of context satisfaction is partially explainable by the growth need construct as shown in

Figure 1. Each of the studies reviewed in this paper examined the effects of both context satisfaction and growth need strength. Unfortunately, given the information reported, it is not possible to determine if Hypothesis 1 would be supported. While informal examination of the data from these studies suggests that the hypothesis may not be fully supported, reanalysis of those data would allow a test of this hypothesis.

The Absorption/Distracton Concept

Each of the following hypotheses involves the absorption/distracton process as explored by McGrath (1976). This process may help to explain why and how context satisfaction plays an important role moderating the job characteristics + worker response relationship. McGrath explored six different classes of stress in developing this concept. For the purpose of the present paper, it is only necessary to consider those sources which are non-task-based (job context) stress factors. According to McGrath, either of two potential phenomena can occur when a non-task-based stressor is operating (we will treat these "two phenomena" as opposite ends of the same continuum). Absorption would cause an employee to focus attention on the task and thus reduce the salience of the non-task source of stress. Distracton would prevent the employee from focusing on the task because of the interfering effect of the non-task source of stress. Presumably, if absorption occurred, strong job characteristics + worker response relationship would be expected. If distracton occurred, a weaker job + response relationship would be anticipated. Given this perspective, the presence of low context satisfaction (a non-task-based stressor) could either strengthen or weaken the job + response relationship depending on the degree to which absorp-

tion or distraction occurred (see Figure 2). This could help to explain why the results of the studies reviewed in this paper appeared inconsistent.

Insert Figure 2 About Here

Before the second hypothesis is stated, it should be pointed out that a similar process was discussed by Oldham (1976) who said that ". . . dissatisfying interpersonal relations might disturb or distract the employee to such a degree that he is unable to fully attend and respond to the characteristics of a complex job" (p. 561). In a similar statement, Oldham et al., (1976) suggested that ". . . active dissatisfaction with such contextual factors distracts the attention of employees from the work itself and orients their energy instead toward coping with the experienced problems (p. 396). The Oldham and Oldham, et al., statements address primarily the distraction phenomenon proposed by McGrath. Both absorption and distraction effects were anticipated by Dunham (1975, 1977) who stated:

". . . employees may or may not focus on task design as a function of non-task elements in the work environment (1977, p. 43) The source of the proposed distraction may be either positive or negative. With very positive non-task environmental factors, the task itself may not be of great importance to the worker. Under negative environmental conditions the task may become the focus of the worker's attention as he draws away from other negative factors" (1977, p. 63). In this statement, Dunham implies the possibility of a curvilinear relationship between context satisfaction and absorption/distraction.

Although Oldham, Oldham, et al., and Dunham explored issues related to those of McGrath, neither provided as complete a framework as that suggested by McGrath.

Hypothesis 2: The relationship between job characteristics and worker responses is moderated by the level of absorption with, or distraction from the task (see Figure 2).

Hypothesis 2A: The observed moderating effect of context satisfaction level on the job characteristics → worker response relationship is due to the fact that context satisfaction impacts upon the level of absorption with, or distraction from, the task which, in turn, moderates the relationship.³

Test of Hypothesis 2: To test Hypothesis 2 it is necessary to measure job characteristics, worker responses, and the level of absorption with, or distraction from the task. Moderated regression analysis could be used to test for the moderating effect.

Test of Hypothesis 2A: To test Hypothesis 2A it is necessary to measure context satisfaction in addition to the measures needed for Hypothesis 2. Analyses can be conducted as for Hypothesis 1 by examining the moderating effect for context satisfaction, partialling absorption/distraction out of context satisfaction and then repeating the moderated regression test using the context satisfaction residual variance to determine if all, none, or part of the observed context satisfaction moderating effect could be explained by the absorption/distraction process. Tests should also be made for possible curvilinear relationships

between satisfaction level and absorption/distraction. (Champoux (1981) illustrates possible analytical models for accomplishing such a test).⁴

A critical issue centers on understanding the conditions under which distraction or absorption will occur. Hypotheses 3 through 8 each address possible determinants of conditions under which a given context satisfaction level will lead to a particular level of absorption or distraction (which in turn moderates the job characteristics + worker response relationship).

Field Dependence/Independence. Witkin, Dyk, Faterson, Goodenough, and Karp (1962) defined field dependence (FD)-independence (FI) as a measure of an individual's ability to respond globally or analytically to complex but structured stimuli. The FI person perceives and evaluates his/her environment in a relatively analytical manner. In addition, the FI person is less concerned with the social aspects of the work environment and is relatively more concerned with the tasks s/he is performing in that environment. The FD person, however, generally does not possess the "disembedding" ability of his/her FI counterpart.

Studies by Gruenfeld and Weissenberg (1970), Barrett, Cabe, Thornton and O'Connor (1975), and Stone (1977) have provided evidence supporting perceptual style differences. For example, Stone found differences in worker perceptions of task characteristics as a function of FD/FI. Barrett, et al., found significant differences in employee sensitivity to work environment features as a function of FD/FI. Gruenfeld and Weissenberg found that FI employees respond to intrinsic factors more than does the FD counterpart. The FD subjects were less capable of discriminating affect for intrinsic factors from the environment in

which they were embedded. This line of reasoning leads to the suggestion that FD/FI will moderate the relationship between context satisfaction and absorption/distraction (which in turn moderates the job characteristics → worker response relationship). It is this second effect of FD/FI which will be focused upon here. Specifically, it is suggested that the relationship between context satisfaction and absorption/distraction will be stronger for FD persons than for FI persons. FD persons, who are heavily dependent on the "field," will be more sensitive to context satisfaction. FI persons, on the other hand, are far less likely to be influenced by context satisfaction levels. Figure 3 illustrates our third testable hypothesis and places this process in the framework of the job characteristics → worker response network.

Insert Figure 3 About Here

Hypothesis 3: FD/FI will moderate the relationship between context satisfaction and absorption/distraction. Specifically, the higher the level of FD, the stronger the relationship between context satisfaction level and absorption/distraction level (i.e., an FD person is more likely to be distracted by either extreme of context satisfaction).

Test of Hypothesis 3: To test Hypothesis 3 it is necessary to measure context satisfaction, absorption/distraction, and FD/FI. Moderated regression analysis can be used to test for this moderating effect.

Instrumentality Perceptions. The concept of instrumentality perceptions (Vroom, 1964) offers another possible mechanism for understanding the conditions under

which a given context satisfaction level will lead to a particular level of absorption/distraction. This argument suggests that a person who perceives that a particular behavior will be instrumental in the achievement of a positively valued outcome or the avoidance of a negatively valued outcome, will have a higher probability of engaging in that behavior than if the behavior is not viewed as instrumental. Applied in the present context, the concept of instrumentality suggests that employees will "choose" to become absorbed in the task if that behavior is perceived by the person to be instrumental in avoidance of a negative outcome (i.e., stressful context satisfaction). This process could help to explain the findings of Abdel-Halim (1979) and Champoux (1981). Workers may have "chosen" to become absorbed in the task to avoid or insulate themselves from the stress caused by low levels of context satisfaction. When absorption in the task is not perceived as instrumental in the removal of, or insulation from the stressor, we would expect distraction to occur. Therefore, this process could also help to explain the findings of Oldham (1976), Oldham, et al., (1976), Orpen (1979), and possibly Katerberg, et al., (1979). In each of these studies, workers may have been distracted from the task since they did not perceive the task as instrumental for the avoidance of, or insulation from, low levels of context satisfaction.

Hypothesis 4: The relationship between context satisfaction and absorption/distraction will be moderated by instrumentality perceptions of absorption as an "insulator" against the stressful effects of the context satisfaction level.

Test of Hypothesis 4: To test Hypothesis 4 it is necessary to measure context satisfaction, absorption/distraction, and the perceived instrumentality of

absorption/distraction. Moderated regression analysis can be used to test for the hypothesized moderating effect.

Perceptual Independence of Task and Non-Task Factors. The perceived proximity of stimuli in one's perceptual space varies across situations. As a consequence, employee perceptions of the task may be quite independent from perceptions of some context factors while quite dependent upon perceptions of other context factors. This is particularly true, for example, for interpersonal context factors. In interdependent work groups, it is hard to differentiate the degree to which co-workers are a part of the task context versus a part of the task itself. To the degree that co-workers are involved in the processing of my own work, they will probably be perceived as part of my job as opposed to being perceived as a part of the environment in which I process my own work independently. On the other hand, where work is done independently or "solo," co-workers are likely to be perceived as a part of the context, but not as a part of the task itself. Where the task is perceptually independent from its context, absorption in the task can provide an escape. On the other hand, where the task and the context are tied together (as with interdependent work groups), absorption in the task also provides absorption in the context. Under these conditions, if the context is negative, absorption in the task would involve the worker even more intimately in the negative stressful situation provided by the context. If the context is positive, absorption in the task would involve the worker more intimately in the positive context as well as more intimately in the task situation. This suggests that absorption is most likely to occur when: (1) the context is independent from the task (e.g., with "solo" work) and especially when the context is negative, or (2) when the context is associated with the

task and positive. This argument is shown in Figure 3 as having an independent moderating effect on the context satisfaction → absorption/distraction relationship. It should be recognized, however, that the process described in this hypothesis may be consistent with Hypothesis 4 (the instrumentality hypothesis) and could even be treated as a determinant of the instrumentality perception as opposed to being treated as an independent moderator of the context → absorption relationship. For this reason, Hypothesis 5 will treat the independence issue as separate from that described in Hypothesis 4 while Hypothesis 5A (see Figure 4) will treat perceptual independence of task and context as a determinant of instrumentality (i.e., instrumentality is an intervening variable between independence of task and context and the moderating effect).

Insert Figure 4 About Here

Hypothesis 5: The relationship between context satisfaction and absorption/distraction will be moderated by the perceived independence of the task and non-task factors. Absorption in the task will be most likely to occur when the task and non-task factors are independent, or when the non-task factors are positive, and least likely to occur when the task and non-task factors are related and negative.

Hypothesis 5A: The moderating effect of the perceived independence of the task and non-task factors on the context satisfaction → absorption/distraction relationship is due to the fact that the independence of the task and non-task factors impacts upon the instrumentality perception which, in turn, moderates the relationship.

Test of Hypothesis 5: To test Hypothesis 5 it is necessary to measure context satisfaction, absorption/distraction, and the perceived independence of task and non-task factors. Moderated regression can be used to test the hypothesis although sub-group analyses (perhaps as post hoc analyses) could better illustrate the nature of the effect.

Test of Hypothesis 5A: To test Hypothesis 5A, it is necessary to measure instrumentality of absorption/distraction in addition to context satisfaction, absorption/distraction, and perceived independence of task and non-task factors. Analyses could be conducted as for Hypotheses 1 and 2A by examining the moderating effect for perceived independence of task and non-task factors, partialling instrumentality out of perceived independence and then repeating the moderated regression test using the residual variance to determine if all, none, or part of the independence moderating effect can be explained by the instrumentality perception process.

Possession of Information. Lawler (1973) discusses the formation of instrumentality perceptions and emphasizes the importance of individual differences. Lawler's discussion suggests that possession of past information concerning the likelihood that job content will "protect" against job context factors will influence the perception of instrumentality for absorption/distraction. Possession of information of this type could have either a direct moderating effect on the context satisfaction → absorption/distraction relationship, or instrumentality perceptions could serve as an intervening variable between possession of information and the moderating effect. Possession of information which suggests that task absorption can help avoid negative consequences of context factors

will make it more likely that the next satisfaction + absorption/distraction relationship will be strong. It should be noted that the source of this information can be from personal experience or from secondary sources.

Hypothesis 6: The relationship between context satisfaction and absorption/distraction will be moderated by the possession of information about the role of job content as an "escape" from context factors. Absorption will be most likely to occur when information suggests that absorption can help escape the effects of job context. Distraction will be most likely to occur when information suggests that absorption would not facilitate escape from the effects of job context (see Figure 3).

Hypothesis 6A: The moderating effect of the possession of information on the context satisfaction + absorption/distraction relationship is due to the fact that the possession of this information impacts upon the instrumentality perception which, in turn, moderates the relationship (see Figure 4).

Test of Hypothesis 6: To test Hypothesis 6 it is necessary to measure context satisfaction, absorption/distraction, and the possession of information. Moderated regression can be used to test the hypothesis.

Test of Hypothesis 6A: To test Hypothesis 6A it is necessary to measure instrumentality of absorption/distraction in addition to context satisfaction, absorption/distraction, and possession of information. Analyses can be conducted as for Hypotheses 1, 2A, and 5A by examining the moderating effect for possession of information, partialling instrumentality out of possession of information,

and then repeating the moderated regression test using the residual variance to determine if all, none, or part of the possession of information moderating effect can be explained by the instrumentality process.

Locus of Control. Lawler (1973) also discusses the role played by the locus of control belief system (also see Rotter, 1966). People with an internal locus of control will have a stronger conviction as to their ability to successfully use involvement in other activities to reduce non-task induced stress. By contrast, the externally controlled individual will be less likely to see absorption in the job as a solution. If the environment is believed to be in control of events, distraction is more likely. Again, this factor may operate through the process of the perceived instrumentality of absorption/distraction. For this reason, Hypothesis 7A will treat locus of control as a determinant of instrumentality.

Hypothesis 7: The relationship between context satisfaction and absorption/distraction will be moderated by the perceived locus of control of the individual. Absorption will be most likely to occur for persons with internal loci of control, while distraction will be most likely to occur for persons with external loci of control (see Figure 4).

Hypothesis 7A: The moderating effect of locus of control on the context satisfaction + absorption/distraction relationship is due to the fact that locus of control impacts upon the instrumentality perception which, in turn, moderates the relationship (see Figure 4).

Test of Hypothesis 7: To test Hypothesis 7, it is necessary to measure context satisfaction, absorption/distraction, and locus of control. Moderated regression can be used to test the hypothesis.

Test of Hypothesis 7A: To test Hypothesis 7A, it is necessary to measure instrumentality of absorption/distraction in addition to context satisfaction, absorption/distraction, and locus of control. Analyses can be conducted as for Hypotheses 1, 2A, 5A, and 6A by examining the moderating effect for locus of control, partialling instrumentality out of locus of control and then repeating the moderated regression analysis using the residual variance to determine if all, none, or part of the locus of control moderating effect can be explained by the instrumentality perception process.

Activation Theory. Scott (1966) in his discussion of the job design + employee response relationship from the perspective of activation theory focuses on the importance of characteristics of the stimulus sources per se. Stimulus characteristics (e.g., intensity, variation, complexity, uncertainty, meaningfulness) affect the level of psychological arousal as a result of the degree of excitation of the brain stem reticular formation.

Scott's model predicts that, under extremely high levels of activation, the individual is unable to turn his/her attention to role demands. It is assumed, therefore, that the greater the degree of stimulus intensity, variation, complexity, uncertainty, and meaningfulness of the signals from the context of the job, the less likely that absorption with the job content will occur (it is more

likely that psychological and physical energy will be directed toward the contextual factors under these circumstances).

Hypothesis 8: The relationship between context satisfaction and absorption/distraction is due to the fact that the context satisfaction level influences the activation level of the worker. This, in turn, directly influences the level of absorption/distraction of the individual (i.e., activation level is an intervening variable). Extremes of these stimuli tend to cause high levels of activation and subsequently distraction from the task itself. Moderate levels of these stimuli would be most likely to lead to absorption (see Figure 5).

Insert Figure 5 About Here

Test of Hypothesis 8: To test Hypothesis 8, it is necessary to measure context satisfaction, absorption/distraction, and activation level. First, regression analyses would be used to establish the relationship between context satisfaction and absorption/distraction. Next, regression analysis would be used to establish the relationship between activation level and absorption/distraction (this will allow not only explanation of the process by which context satisfaction impacts on absorption/distraction but also a direct examination of the effect of activation level on absorption/distraction). Next, activation level would be partialled out of context satisfaction and the residual variance would be used in a final regression analysis to determine if activation level accounted for all, none, or part of the effect of context satisfaction on absorption/distraction. In testing this hypothesis, possible curvilinear relationships between context satisfaction and activation levels should be explored.

CONCLUSIONS

A review of the available literature suggested that the effect of the level of context satisfaction on the job characteristics + worker response relationship is an important issue. Unfortunately, in tests of this effect, insufficient attention has been given to the process involved. Because of this lack of attention, the results of the studies which have addressed the context satisfaction moderating effect appear to produce contradictory findings. The hypotheses developed in the present paper argue that these findings may prove to be consistent if the underlying processes are examined.

Several different processes have been detailed through development of a set of hypotheses and plans for hypothesis testing. It is important that competitive tests of these hypotheses be conducted as opposed to isolated tests of individual processes. It is possible to test each of the processes, to determine how many of the hypothesized processes are actually operating, and to determine the relative impact of each of the processes by measuring, within one study, each of the following: job characteristics, worker responses, context satisfaction, growth need strength, absorption/distraction (an adequate measure of which needs to be developed), field dependence/independence, instrumentality of absorption/distraction, perceived independence of task and non-task factors, possession of information, locus of control and activation level.

More than one of these processes may be operating at the same time. Furthermore, there are likely to be other factors which are also operating as is suggested by the "empty boxes" in Figures 1-5.

To the degree that the hypotheses developed in this paper are shown to be true, the following observations could be made: (1) low context satisfaction leads to low levels of growth need strength which, in turn, weakens the job characteristics + worker response relationship; (2) context satisfaction level influences level of worker absorption/distraction with the task which in turn moderates the job satisfaction + worker response relationship; (3) the relationship between context satisfaction and the level of absorption/distraction is moderated by field dependence/independence, perceived instrumentality of absorption/distraction, perceived independence of task and non-task factors, possession of information, and locus of control; (4) the perception of instrumentality of absorption/distraction is influenced by the level of perceived independence of task and non-task factors, possession of information, and locus of control; and (5) activation level intervenes in the relationship between context satisfaction and absorption/distraction level.

It is clear that what is needed to understand the role of context satisfaction in the job characteristics + worker responses relationship is empirical investigation of the processes involved and competitive testing of the relative roles of each of the proposed processes. Concurrently, conceptual work to identify other processes involved in the effect should continue.

REFERENCES

- Abdel-Halim, A.A. Individual and interpersonal moderators of employee reactions to job characteristics: A re-examination. Personnel Psychology, 1979, 32, 121-137.
- Alderfer, C.P. An empirical test of a new theory of human needs. Organizational Behavior and Human Performances, 1969, 4, 142-175.
- Barrett, G.V., P.A. Cabe, C.L. Thornton, and E.J. O'Connor. Relations between field dependence and reactions to change in job attitudes. Journal of Applied Psychology, 1975, 60 649-651.
- Champoux, J.E. The moderating effect of work context satisfactions on the curvilinear relationship between job scope and affective response. Human Relations, 1981, 34, 6, 503-515.
- Champoux, J.E. and W.S. Peters. Applications of moderated regression and job design research. Personnel Psychology, 1980, 33, 759-783.
- Dunham, R.B. Affective responses to task characteristics: The role of organizational function. Doctoral dissertation, University of Illinois, Urbana, Illinois, 1975.
- Dunham, R.B. Reactions to job characteristics: Moderating effects of the organization. Academy of Management Journal, 1977, 20, 42-65.

Gruenfeld, L.W. and P. Weissenberg. Field independence and articulation of sources of job satisfaction. Journal of Applied Psychology, 1970, 54, 424-426.

Herzberg, F. Work and the Nature of Man, Cleveland: World, 1966.

Katerberg, R., P.W. Hom and C.L. Hulin. Effects of job complexity on the reactions of part-time employees. Organizational Behavior and Human Performance, 1979, 24, 317-332.

Lawler, E.E., III. Motivation in work organizations. Monterey, CA: Brooks/Cole, 1973.

Maslow, A.H. A theory of human motivation. Psychological Review, 1943, 50, 370-396.

McGrath, J.E. Stress and behavior in organizations. M.D. Dunnette (ed.) Handbook of Industrial and Organizational Psychology, Chicago: Rand McNally, 1976, 1351-1395.

Oldham, G.R. Job characteristics and internal motivations: The moderating effect of interpersonal and individual variables. Human Relations, 1976, 29, 559-569.

Oldham, G.R., J.R. Hackman, and J.L. Pearce. Conditions under which employees respond positively to enriched work. Journal of Applied Psychology, 1976, 61, 395-403.

Orpen, C. The effects of job enrichment on employee satisfaction, motivation, involvement, and performance: A field experiment. Human Relations, 1979, 32, 189-217.

Rotter, J.B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80.

Scott, W.E., Jr. Activation theory and task design. Organizational Behavior and Human Performance, 1966, 1, 3-30.

Stone, E.F. Field independence and perceptions of task characteristics: A laboratory investigation. Journal of Applied Psychology, 1979, 64, 305-310.

Vroom, V. Work and Motivation, New York: Wiley, 1964.

Witkin, H.A., R.B. Dyk, H.F. Faterson, D.R. Goodenough, and S.A. Kaup. Psychological Differentiation, New York: Wiley, 1962.

FOOTNOTES

1. Reprints may be requested from Randall B. Dunham, University of Wisconsin Graduate School of Business 1155 Observatory Drive, Madison, WI 53706.

2. Along similar lines of reasoning, Maslow (1943) and Aldefer's (1969) discussions of need theory suggest that employee responsiveness to job content factors is most likely to follow the reasonable satisfaction of lower order needs by work environment factors.

3. A similar hypothesis can be constructed in an attempt to understand the moderating role of employee growth need strength and help to explain the inconsistent findings which have emerged for this moderating effect. The hypothesis is:

The observed moderating effect of growth need strength on the job characteristics → worker response relationship is due to the fact that growth need strength impacts the level of absorption with, or distraction from, the task which in turn moderates the relationship. For example, high growth need strength employees are more likely to become absorbed in the task (particularly if they view the task as a source of potential intrinsic reward).

4. Similarly, possible curvilinear relationships of this type should be explored in subsequent hypothesis testing.

Figure 1

Illustration of Hypothesis 1

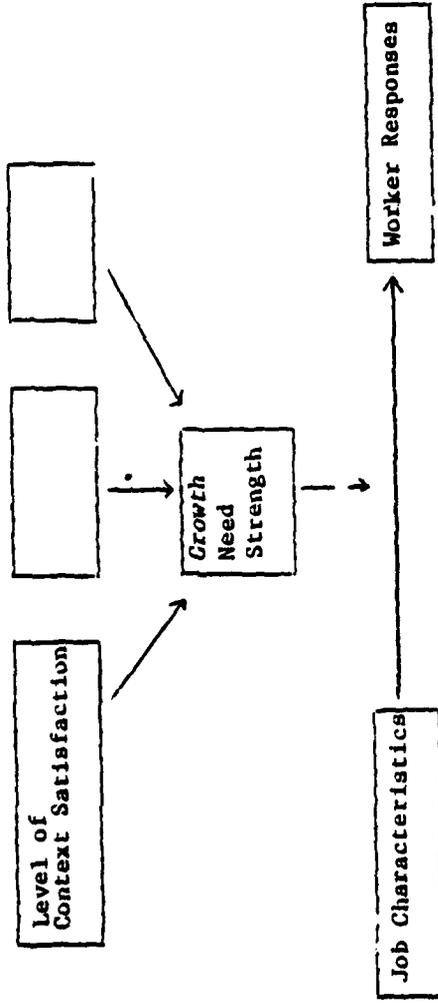


Figure 2

Illustration of Hypotheses 2 and 2A

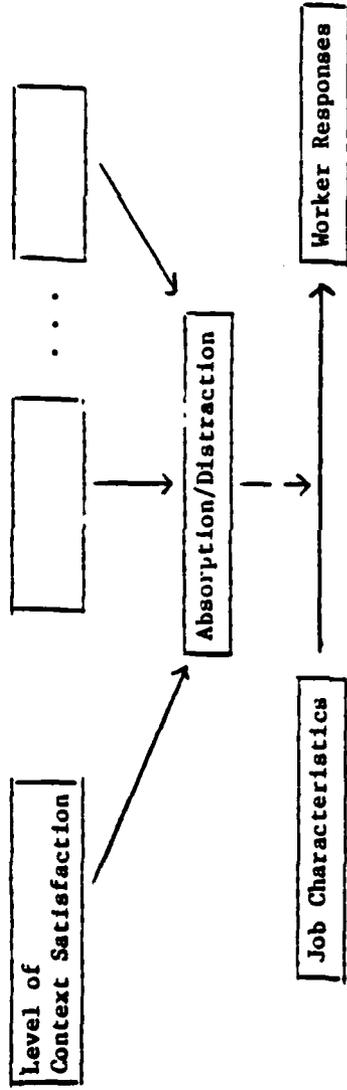


Figure 3
Illustration of Hypotheses 3-7

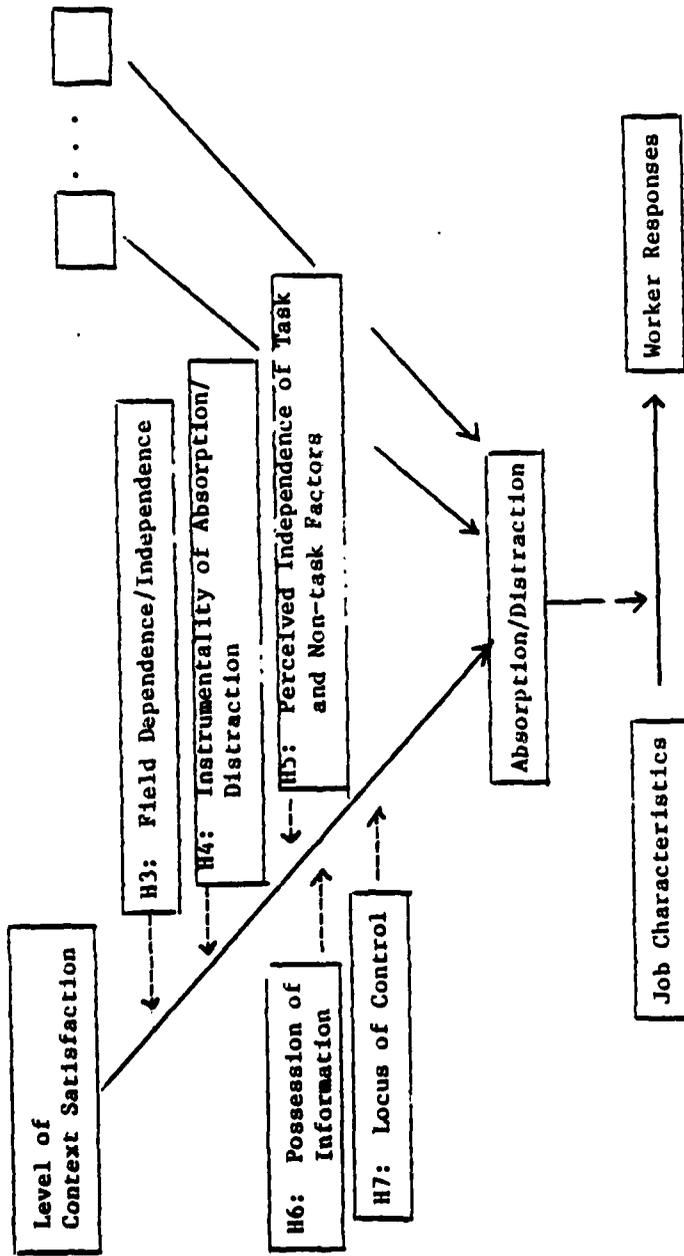


Figure 4

Alternate Hypotheses H5A - H7A

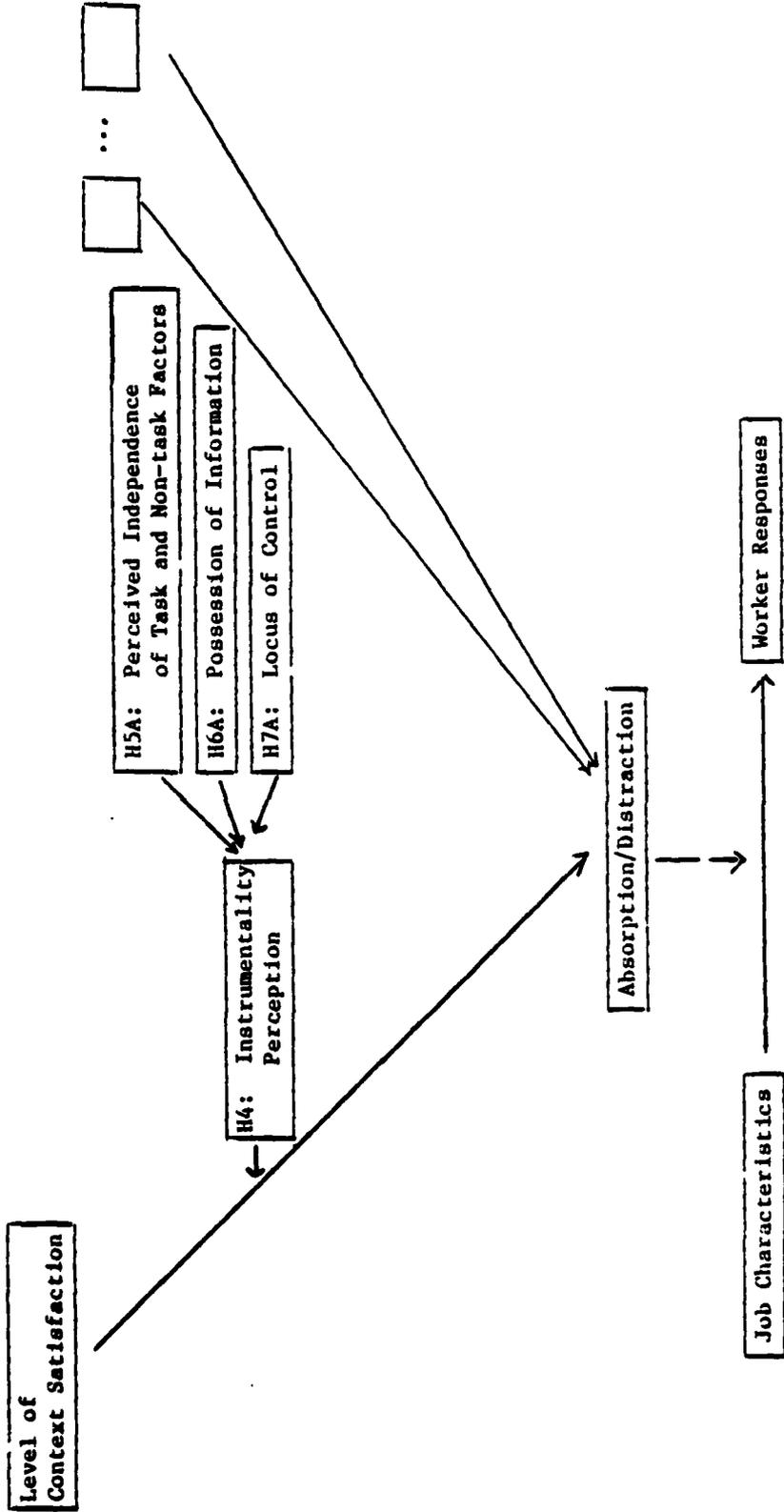
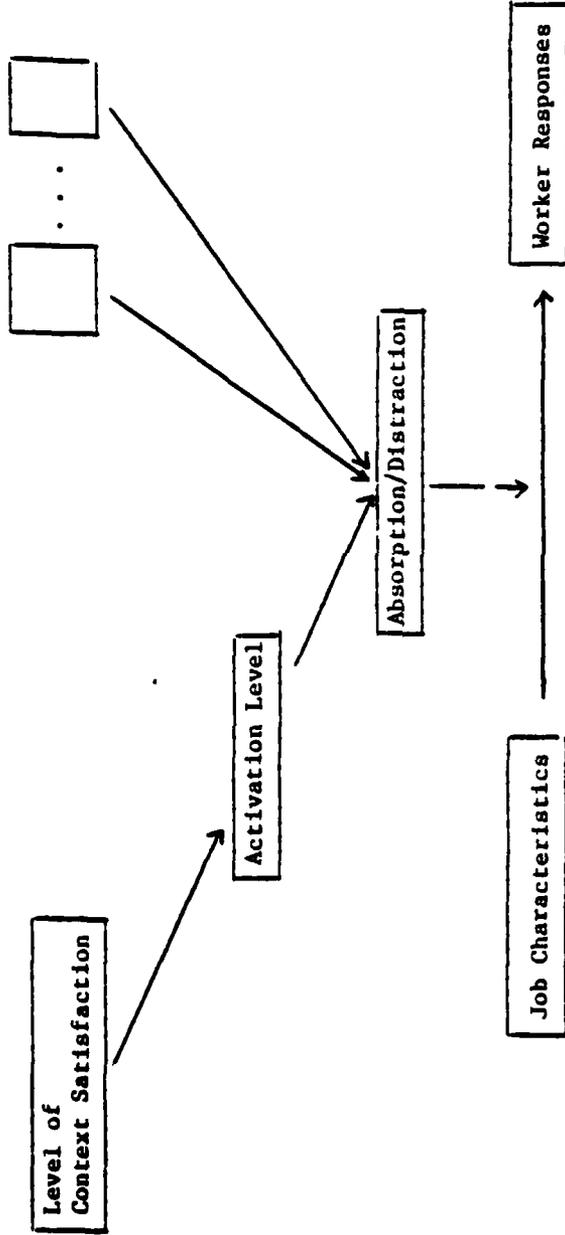


Figure 5
Illustration of Hypothesis 8



ATE
MED
-88