Employee growth need strength (EGNS) is defined as a worker's need to obtain "growth" satisfaction from his work. The moderating influence of EGNS on relationships between global job satisfaction and the job attributes of conflict and ambiguity were investigated. Production supervisors (N=57) completed questionnaires on role perceptions, job satisfaction, and EGNS. Results from moderated regression analysis suggest that EGNS significantly influences the relationship between role-conflict and satisfaction, but does not significantly influence the relationship between role-ambiguity and satisfaction. Findings point out the importance of individual differences as a moderator of the relationships between job attributes and employee affective response. Results also contribute to the construct validation of the trait of EGNS.

(Author/NPB)
EMPLOYEE GROWTH NEED STRENGTH
AS A MODERATOR OF RELATIONSHIPS BETWEEN JCP
ATTRIBUTES AND JOB SATISFACTION

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To the Educational Resources Information Center (ERIC)
EMPLOYEE GROWTH NEED STRENGTH AS A MODERATOR OF RELATIONSHIPS BETWEEN JOB ATTRIBUTES AND JOB SATISFACTION

Empirical investigations of the relationships between job satisfaction and the variables of role conflict and role ambiguity have yielded findings which are suggestive of both main and moderator effects. The main-effect results typically point to negative relationships between job satisfaction and role conflict and between job satisfaction and role ambiguity (Kahn et al, 1964; Rizzo, House, and Lirtzman, 1970; Lyons, 1971; Greene and Organ, 1973; Johnson and Stinson, 1975; Szilagyi, Sims, and Keller, 1976; Miles, 1976; Beehr, 1976). However, negative relationships are not universally obtained (e.g., Tosi and Tosi, 1970; Tosi, 1971; Schuler, 1975).

The search for moderators of these relationships has been directed at both macro (i.e., organizational) and micro (i.e., individual differences) level variables. The results of the macro-level studies have suggested the importance of occupant's organizational level (Hamner and Tosi, 1974; Schuler, 1975; Schuler, 1977; Szilagyi et al, 1976), group cohesiveness (Beehr, 1976), and integration and boundary-spanning activities (Miles, 1976) as moderators. Studies directed at micro-level variables have investigated the moderating influence of employees' internal-external locus of control (Szilagyi, Sims, and Keller, 1976;
The present study further explores the influence of micro-level moderators with respect to the individual differences variable of employee growth need strength. Employee growth need strength is defined as a worker's need to obtain "growth" satisfaction from work activities. This trait is conceptualized as "a malleable individual difference characteristic which is predicted to influence how positively an employee will respond to a job with objectively high motivating potential" (p. 163, Hackman and Oldham, 1975). As a function of an individual's predisposition to respond to favorable and unfavorable job attributes, it can be hypothesized that the relationship between role ambiguity and job satisfaction and the relationship between role conflict and job satisfaction should vary. Simply stated, it is anticipated that job characteristics will have a stronger influence on job-related affect for high growth need strength individuals because of their greater concern with factors that affect their work-life. More specifically, it can be predicted that these relationships will be comparatively more negative for individuals who score high on growth need strength relative to individuals who score low on growth need strength. However, it can also be predicted (on an intuitive basis) that these relationships will be just the reverse. That is to say, it is also conceivable that individuals who score high on growth need strength will find jobs possessing greater conflict and ambiguity to be more satisfying because of the novelty, learning oppor-
tunities, variety, and challenge which such jobs present. Therefore, the manner in which growth need strength moderates the relationships of conflict and ambiguity with job satisfaction is uncertain. The resolution of this issue is only possible with recourse to empirical investigation.

The present study was conducted in order to determine the direction in which worker growth need strength moderates (if at all) the relation of job conflict-ambiguity and worker satisfaction. The intent of the present investigation may be summarized in two questions:

Q1) Is degree of role conflict more negatively or positively related to job satisfaction for individuals comparatively high on individual growth need strength?, and

Q2) Is degree of role ambiguity more negatively or positively related to job satisfaction for individuals comparatively high on individual growth need strength?

**METHOD**

**Sample**

Fifty-seven participants (fifty men and seven women) in a university-sponsored supervisory development program provided data for this study (mean education = 13.28 years). The majority of the participants listed their job title as "foreman" or "production supervisor." Problems of role conflict and ambiguity are commonly judged as most serious for these "men-in-the-middle." The diversity of the home organizations which the respondents
represented provided a distinct methodological advantage for this research in that it afforded a greater heterogeneity of backgrounds. Greater heterogeneity counters potential problems of range restrictions for the variables of interest. A further advantage of the present sample is that it controls for occupational level (Hamner and Tosi, 1974).

Instruments

At the beginning of the supervisory development program, each participant anonymously completed a test booklet containing the following questionnaires: (1) role perceptions, (2) job satisfaction, and (3) employee growth need strength. At the completion of the program, each participant was given individual feedback (via subject-generated identification code numbers) on their scores for these and other scales.

Role Assessment

An eight-item scale developed by Rizzo, House, and Lirtzman (1970) was employed to measure degree of role conflict (sample items: "I receive incompatible requests from two or more people" and "I have to buck a rule or policy in order to carry out an assignment"). Six additional items (Rizzo et al 1970) were used to measure role ambiguity (sample items: "I know exactly what is expected of me" and "I feel certain about how much authority I have"). Each item is a seven-point Likert-type scale with anchors "1 = Very False" to "7 = Very True." Respondents were instructed to indicate the degree to which each statement was true for his/her present job.
The results of an examination of the properties of the Rizzo et al role scales indicate that they possess acceptable psychometric properties (Schuler, Aldag, and Brief, 1977).

**Job Satisfaction**

Global job satisfaction was assessed with the Brayfield-Rothe Job Satisfaction Scale (1951). This scale employs 18, five-point Likert-type, items. Respondents were to indicate their degree of agreement with each item, from "1 = strongly disagree" to "5 = strongly agree"; (sample items: "I feel fairly well-satisfied with my present job" and "I am disappointed that I ever took this job.").

**Growth Need Strength**

The "job preference" format of the Job Diagnostic Survey (Hackman and Oldham, 1975) was utilized to assess individual growth need strength. This scale required respondents to indicate their preference for pairs of hypothetical jobs on five-point scales (sample items: "A job where the pay is very good" versus "A job where there is considerable opportunity to be creative and innovative" and "A job where you are often required to make important decisions" versus "A job with many pleasant people to work with"). For each of the 12 items in the scale, a hypothetical job with attributes relevant to growth need satisfaction is paired with a hypothetical job which is notable for satisfying one of several other needs (e.g., job security). In the development of this scale, heavy emphasis was placed on attaining a highly reliable instrument (p. 170, Hackman and Oldham, 1975).
RESULTS

Table 1 presents the means, standard deviations, and intercorrelations among the variables. One of the more noteworthy relationships is a significant positive correlation between role ambiguity and role conflict. Previous research has also revealed a positive correlation between these dimensions (Rizzo, House, and Lirtzman, 1970). An obtained negative correlation between role ambiguity and job satisfaction is also consistent with the majority of the findings of similar analyses. Somewhat surprising is the lack of a negative relationship between role conflict and job satisfaction in the present sample. As stated in the introduction, however, negative correlations between role perception and job satisfaction are not invariably found. Also, House and Rizzo (1972) and Rizzo, House, and Lirtzman (1970) have observed that satisfaction correlates more strongly with role ambiguity than with role conflict.

To examine the effects of the hypothesized moderators on the relationships between job satisfaction and job attributes, a moderated multiple linear regression model was used. This multivariate technique, in essence a test for an interaction, compares the proportion of criterion variance accounted for via
an equation solely composed of main effects with the proportion of criterion variance accounted for based on an equation composed of main effects and a multiplicative interaction term (Zedack, 1971; Cohen, 1978). The incremental variance (i.e., the resulting difference between models in variance accounted for) is tested for significance with reference to an $F$ distribution (Kerlinger and Pedhazur, 1973). This analysis was performed for each of the two questions under investigation by generating an interaction term for each hypothesized interaction (i.e., for Question 1, role conflict x growth need strength; and for Question 2, role ambiguity x growth need strength).

Table 2 displays the "main effects" and "main effects-plus-interaction" regression models for each of the two questions. As exhibited in this Table, a significant interaction was obtained for Question 1 ($\Delta R^2 = .094, F = 5.75, df = 1/52, p < .05$) while evidence of a significant interaction was not obtained for Question 2 ($\Delta R^2 = .033, F = 1.99, df = 1/52, n.s.$).

To obtain a fuller understanding of the multiple regression results, subgrouping analysis was conducted. A median split on growth need strength was performed in order to create contrastive groups. Bivariate regressions for job attributes and job satisfaction were then plotted (see Figure 1). From the directions of these plots, two conclusions are suggested. First, individuals who score comparatively high on growth need strength

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Insert Table 2 here

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respond more negatively (in terms of job satisfaction) to role conflict (r role conflict and job satisfaction, for high growth need strength, = -.18; r for low growth need strength = .20). And second, individuals who score comparatively high on growth need strength respond more negatively to role ambiguity (r role ambiguity and job satisfaction for high growth need strength, = -.41, p < .05; r for low growth need strength = .05). However, the strength of the moderating effect of growth need strength is stronger for role conflict relative to role ambiguity.

Insert Figure 1 here

DISCUSSION

The findings of the present investigation suggest the importance of considering individual differences variables in conjunction with attempts at further understanding the relationships between job satisfaction and job attributes. We may interpret the moderating influences of growth need strength as (1) being supportive of an emerging theory of role dynamics and (2) contributing to the construct validation of a critical variable in the Hackman-Oldham model of job enrichment. With reference to a theory of role dynamics, it is becoming increasingly apparent that job characteristics are not uniformly related to job satisfaction in a linear fashion. Instead, the evidence continues to suggest that different types of individuals respond differently to role ambiguity and role conflict. Therefore, increasing degrees of ambiguity and conflict cannot be simply interpreted as reflecting increasing degrees of an aver-
sive condition.

Because research investigating the moderating influences of individual differences variables has relied on a cross-sectional methodology and correlational analyses, the obtained support of hypothesized moderators may be, in part, due to uncontrolled factors in the work setting (e.g., worker self-selection processes or job occupants modifying their tasks) and/or artifactual aspects of individual differences measures. Questions concerning the influence of extraneous factors in role dynamics research require the use of the, as yet, largely unexplored strategies of longitudinal design and experimental methodology.

The interactive manner in which growth need strength contributed to an accounting of criterion variance in the present study enables a refinement of our definition of the "growth need strength" construct. According to Hackman and Oldham (1975), individuals who score high on growth need strength tend to respond more favorably to "enriched" jobs than do individuals who score low on measured growth need strength. However, the attributes of job conflict and ambiguity (although they provide greater variety and challenge) are not responded to in a positive fashion by individuals who score high on growth need strength. The present study nonetheless supports Hackman and Oldham's (1975) general contention that employee growth need strength acts as a moderator of the relationships between job attributes and satisfaction. The findings of the present set
of analyses also furthers our assurance that employee growth need strength is a valid construct. However, the assessment of this construct does not as yet afford sufficient precision to warrant its use for diagnostic, predictive, or prescriptive purposes.

In conclusion, the present study underscores the importance of an individual differences moderator of the relationships between job attributes and employee affective response. Perhaps future efforts should be devoted to integrating the concepts of role conflict-ambiguity and the previously identified macro-micro moderators within a broader theoretical framework which would attempt to explain the translation of job dimensions into worker affective responses.
REFERENCES


Table 1

Means, Standard Deviations and Intercorrelations of Conflict, Ambiguity, Growth Need Strength and Job Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\bar{X}$</th>
<th>S.D.</th>
<th>$\alpha$</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conflict</td>
<td>30.28</td>
<td>8.49</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Ambiguity</td>
<td>16.58</td>
<td>6.19</td>
<td>.80</td>
<td>.39*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Growth Need Strength$^a$</td>
<td>3.47</td>
<td>0.45</td>
<td>.64</td>
<td>.12</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>4. Job Satisfaction</td>
<td>69.00</td>
<td>6.97</td>
<td>.81</td>
<td>.00</td>
<td>-.20</td>
<td>.24</td>
</tr>
</tbody>
</table>

$^a$ Item values are averaged in calculating growth need strength.

* $p < .01$, two-tailed.
Table 2

Main Effects and Main Effects -- Plus --
Interaction Models: Predicting Job Satisfaction

<table>
<thead>
<tr>
<th>Question</th>
<th>Model</th>
<th>$R^2$</th>
<th>$F$</th>
<th>df</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RC,GN,RC X GN</td>
<td>.152</td>
<td>22.47**</td>
<td>2/53</td>
<td>.094</td>
<td>5.75*</td>
<td>1/52</td>
</tr>
<tr>
<td></td>
<td>RC,GN</td>
<td>.058</td>
<td>3.35</td>
<td>1/54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RA,GN,RA X GN</td>
<td>.138</td>
<td>4.25*</td>
<td>2/53</td>
<td>.033</td>
<td>1.99</td>
<td>1/52</td>
</tr>
<tr>
<td></td>
<td>RA,GN</td>
<td>.105</td>
<td>6.34*</td>
<td>1/54</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: RC = Role Conflict, GN = Growth Need Strength, RA = Role Ambiguity.

* $p < .05$

** $p < .01$
Figure 1
Plots of Results of Subgrouping Analysis

Satisfaction vs. Growth Need Strength

Satisfaction vs. Conflict

Satisfaction vs. Ambiguity