

# ROLE STRESS AND JOB SATISFACTION: THEIR SUPERVISORY ANTECEDENTS AND THEIR INFLUENCE ON ORGANIZATIONAL COMMITMENT

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## OPSOMMING

Nieteenstaande die toenemende gebruik van tegnologie in ondernemings, is die optimale benutting van menslike hulpbronne steeds onmisbaar en van deurslaggewende belang. Die doeltreffende gebruik van menslike hulpbronne kan egter belemmer word deur 'n hoë arbeidsomset en afwesigheidsyfer. Daar word aanvaar dat die bereidwilligheid om by die werk te wees in 'n groot mate beïnvloed word deur die mate waartoe werknemers hulleself vereenselwig met die onderneming se waardestelsels en doelstellings. Hierdie verskynsel staan bekend as organisatoriese toewyding (organizational commitment). Die studie stel empiries ondersoek in na die verband tussen organisatoriese toewyding en arbeidsomset en afwesigheid. 'n Posing is ook aangewend om te bepaal tot watter mate bestuursoptrede organisatoriese toewyding kan beïnvloed. Strukturele modellering (structural equation modelling) is gebruik om vas te stel of rolstres en werkstevredenheid tussenveranderlikes (intervening variables) is in die verwantskap tussen bestuursoptrede en organisatoriese toewyding. Die empiriese resultate dui daarop dat intrinsieke werkstevredenheid 'n sterk positiewe invloed op organisatoriese toewyding uitoefen, terwyl rolkonflik 'n negatiewe invloed het. 'n Bestuurstyl wat werknemers deelname gee in besluitneming in die organisasie, kan rolkonflik onder werknemers verminder, terwyl dit terselfdertyd werkstevredenheid verhoog.

## ABSTRACT

Despite the more extensive use of other resources such as modern technology, the optimal utilization of human resources will remain a daunting challenge to all managers during the 1990's and beyond. The absence of employees from work, both temporarily and permanently, however, renders the realization of this objective near impossible. Ensuring that employees want to be and are at work, and stay there, thus become important secondary objectives. Both absenteeism and turnover have been shown to undermine optimal employee performance. Some argue that the willingness to be at work will depend on the degree to which employees identify with the organization's goals, objectives, and values (commitment to the organization). This study investigated this contention, and whether the behaviour and actions of supervisors can influence the organizational commitment of employees. A structural equation modelling approach was used to assess whether job stress and job satisfaction serve as intervening variables in the supervision-organizational commitment relationship. The empirical results revealed that intrinsic job satisfaction exerts a significant positive influence on organizational commitment, and role conflict, a negative influence. A management style which can be described as participative is likely to limit the harmful influence of role conflict while enhancing feelings of intrinsic job satisfaction among employees.

Despite the increased use of modern technology by business firms and other organizations, the key to long term survival and growth for many is the effective utilisation of its human resources. A number of organizational factors have been shown to have a negative impact on managerial efforts to optimise the use of this important resource. Two of these are absenteeism and turnover. High levels of absenteeism and turnover have obvious cost implications for most organizations (Newton, 1973), and impairs organizational effectiveness (Price, 1977) simply because employees who are not at work cannot perform – least of all optimally. In an effort to limit the impact of the negative influences exerted by absenteeism and turnover, organizations attempt to forge stronger membership linkages between employees and the organization to encourage them to be at work and to maintain their membership. One (but not the only way) to achieve this is to develop strong feelings of psychological attachment to the organization among employees (Mowday, Steers and Porter, 1982). This attachment is referred to as 'organizational commitment'. Besides the fact that organizationally committed employees are

at work more regularly (lower absenteeism) and are less likely to resign (lower turnover), there are also those who believe that they are better performers (Chonko, 1986).

Both individual job performance and organizational effectiveness are the responsibility of, and largely influenced by, managerial actions and behaviour (Fry, Futrell, Parasuraman and Chmielewski 1986: 154), as managerial behaviour has an important influence on the working environment prevalent in an organization. The working environment will determine (amongst others) whether employees want to exert effort on behalf of the organization, and are able to perform as expected by both customers and management.

Although there are those who believe that employees must be coerced to perform effectively (see Stoner, 1992: 441 for a discussion of McGregor's Theory X), research has shown that in service industries in particular (Schneider, 1980), this is not the case. Service industry employees have, in fact, been found to be enthusiastic to satisfy consumer needs, want to work with customers, and are concerned about the well-being of their firms. It is a key contention of this study that employees in service industries (whether profit or non-profit) will only

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behave (perform) as expected if they really want to – that is, if they identify with the organization's goals and objectives. In other words, employees who are committed to the organization they work for are likely to be superior performers.

This study investigates the influence of two antecedents (role stress and job satisfaction) on the organizational commitment of employees and the extent to which managerial behaviour can establish a culture of organizational commitment among employees.

### THE RATIONALE OF THIS STUDY

The basic rationale of this study is that employees will only behave (perform) as expected by both their superiors and their customers if they really want to. Management must thus create a working environment in which employees want to and can perform appropriately. Three factors may impact on such willingness. Firstly, the degree to which employees identify with the organization's goals, objectives and values. In other words, someone who is dissatisfied with the organization will not perform optimally. A second factor is the extent to which employees enjoy their daily work. Employees who dislike their jobs are likely to under-perform. Lastly, whether employees know what is expected or they are subjected to conflicting expectations from different parties. Role stress can impact on job performance.

The point of departure of this study is that, to establish and maintain a climate of organizational commitment (and thus to enhance job performance and organizational effectiveness), management should attempt to improve the job satisfaction of employees while minimising the harmful influence of role stress.

### THE INFLUENCE OF ROLE STRESS AND JOB SATISFACTION ON ORGANIZATIONAL COMMITMENT

#### Role ambiguity and organizational commitment

As is the case with role conflict, the most important outcomes of role ambiguity studied since 1964 have been job satisfaction, performance, and to a lesser extent, organizational commitment. Those who did investigate the relationship between role ambiguity and organizational commitment (Dubinsky and Hartley, 1986; Dubinsky and Mattson, 1979; Johnston et al., 1990), all found a negative influence. Oliver and Brief (1977/8) did not find support for this contention. Despite the one dissenting finding the available literature suggests that:

H<sub>1</sub>: Role ambiguity exerts a negative influence on organizational commitment

#### Role conflict and organizational commitment

Few studies have investigated the influence of role conflict on the organizational commitment of employees. The empirical results reported by Dubinsky and Mattson (1979) and Dubinsky and Hartley (1986) suggested, however, a negative influence. Johnston, *et al.* (1990) detected only an indirect influence. Oliver and Brief (1977/8), on the other hand, did not find a relationship at all.

Based on the limited available research it is hypothesised that:

H<sub>2</sub>: Role conflict exerts a negative influence on organizational commitment

#### Job satisfaction and organizational commitment

It is hypothesised that the higher the level of job satisfaction experienced by employees, the higher their commitment to their organizations is likely to be (Johnston et al., (1990).

The empirical results reported by Bluedorn (1982), Boulian (1974), DeCotiis and Summers (1987), Dubinsky and Hartley (1986), Glisson and Durick (1988), Johnston et al. (1990), and Mowday et al. (1982) showed that job satisfaction exerted a fairly strong positive influence on the organizational commitment of their respondents.

Bateman and Strasser (1984) however found that organizational commitment is an antecedent of job satisfaction. Despite this dissenting view, it is hypothesised that:

H<sub>3</sub>: Extrinsic job satisfaction exerts a positive influence on organizational commitment

H<sub>4</sub>: Intrinsic job satisfaction exerts a positive influence on organizational commitment

### THE SUPERVISORY ANTECEDENTS OF ROLE STRESS AND JOB SATISFACTION

From a management perspective it seems desirable, if not imperative, to limit the occurrence and potentially damaging influence of role conflict and role ambiguity on organizational effectiveness. Researchers who have studied the antecedents of role conflict and role ambiguity have identified a variety of potential influences. These include autonomy (Oliver and Brief, 1977/8), experience (Walker, Churchill, and Ford, 1975), level of education (Lyonski, 1985), and influence over standards (Behrman and Perreault, 1984). In this study, the focus will be on the relationship between supervisory behaviour and role stress (role conflict and role ambiguity) on the one hand, and organizational commitment on the other hand. The following supervisory behaviours will be considered: performance feedback, supervisory consideration, initiation of structure, participation in decision-making, and communication.

#### Performance feedback and role stress

Performance feedback refers to a superior's communication to a subordinate about the quality of job performance. It can be expected that such feedback will clarify for the employee what is expected from him, that is, reduce the likelihood of role ambiguity (Oliver and Brief, 1977-1978, Walker et al., 1975).

The empirical results reported by Jaworski and Kohli (1991) and Teas et al. (1979) confirm the notion that performance feedback reduces the role ambiguity of, in their study, salespeople. Oliver and Brief (1977-1978) established that performance feedback reduced role ambiguity significantly, but had only a marginal influence on role conflict. Teas (1983) found a negative relationship between feedback and role ambiguity, but not role conflict.

Based on the empirical findings summarised above it is hypothesised that:

H<sub>5</sub>: Performance feedback exerts a negative influence on role ambiguity

H<sub>6</sub>: Performance feedback does not influence role conflict

#### Performance feedback and job satisfaction

Performance feedback is positively related to job satisfaction (Hackman and Lawler, 1971; Teas 1983; Teas and Horrell, 1981), mainly because employees who are properly informed about their supervisor's evaluation of their performance are more likely to have realistic expectations of remuneration and promotion possibilities. In addition, performance feedback is likely to reduce role ambiguity which often has a negative influence on job satisfaction. It is accordingly hypothesised that:

H<sub>7</sub>: Performance feedback exerts a positive influence on extrinsic job satisfaction

H<sub>8</sub>: Performance feedback exerts a positive influence on intrinsic job satisfaction

### Supervisory consideration and role stress

Consideration refers to leader behaviours concerned with promoting the comfort and well-being of subordinates (Schriesheim and Stogdill, 1975). Consideration concerns the degree to which managers are supportive, friendly, considerate, consult subordinates and recognise their contribution.

Teas (1983) reported a negative relationship between consideration and both role conflict and role ambiguity. Both Fry et al. (1986) and Johnston et al. (1990) found that consideration reduces role conflict, but in Fry's case, not role ambiguity.

Based on the empirical findings summarised above it is hypothesised that:

H<sub>9</sub>: Supervisory consideration exerts a negative influence on role ambiguity

H<sub>10</sub>: Supervisory consideration exerts a negative influence on role conflict

### Supervisory consideration and job satisfaction

Consideration and job satisfaction are positively related (Childers, Dubinsky, and Skinner, 1990; Schriesheim, House and Kerr, 1976; Teas, 1983; Teas and Horrell, 1981; Valenzi and Dessler, 1978). Lucas (1986) found a positive relationship between consideration and intrinsic job satisfaction. Kohli (1989) found that consideration only has an effect on the job satisfaction of salespeople who are relatively experienced, and those who regard themselves as high performers, but not for those who are inexperienced or who do not regard themselves as high performers.

It is accordingly hypothesised that:

H<sub>11</sub>: Consideration exerts a positive influence on extrinsic job satisfaction

H<sub>12</sub>: Consideration exerts a positive influence on intrinsic job satisfaction

### Initiating structure and role stress

Initiating structure refers to leader behaviours which clearly define the roles of the leader and subordinates (Schriesheim and Stogdill, 1975). By initiating structure, a manager strictly directs subordinates, clarifies their roles, coordinates, solves problems, criticises and pressurises to perform. Initiating structure thus resembles task-orientated behaviour (Yukl, 1981).

Initiating structure has been found to reduce role ambiguity (Schriesheim, House and Kerr, 1976; Sims and Szilagyi, 1975; Sims and Szilagyi, 1975).

Teas (1983), however, found a positive relationship between initiation of structure and role conflict. Teas (1983) argues that managers who overdo close supervision limit the ability of employees to satisfy the different needs of various role-set members and therefore increase the possibility of role conflict.

Based on the empirical findings summarised above it is hypothesised that:

H<sub>13</sub>: Initiating structure exerts a negative influence on role ambiguity

H<sub>14</sub>: There is no relationship between initiating structure and role conflict

### Initiating structure and job satisfaction

Initiating structure has a significant positive influence on job satisfaction (House 1971; Schriesheim, House and Kerr, 1976; Childers, Dubinsky, and Skinner, 1990). A study reported by Teas and Horrell (1981) among salespeople and a study of professionals (Howell and Dorfman, 1986), however, did not

find support for this contention. Howell and Dorfman (1986) concluded that professionals resented what they saw as interference from formal leaders. Non-professionals on the other hand, were positively inclined towards initiation of structure. In a study of industrial salespeople, Kohli (1989) concluded that industrial salespeople are not responsive to initiation of structure. Sims and Szilagyi (1975), on the other hand, found that initiating structure had a negative influence on the job satisfaction of those who work in an environment of relative certainty. In other words, in a work environment in which performance expectations are clearly defined, initiating structure is often seen as unnecessary interference. In an environment which is only loosely structured and even volatile, initiating structure is often positively viewed as it serves as a guideline to employees.

In this study it is hypothesised that:

H<sub>15</sub>: Initiating structure exerts a positive influence on extrinsic job satisfaction

H<sub>16</sub>: Initiating structure exerts a positive influence on intrinsic job satisfaction

### Participation in decision-making and role stress

Participation in decision-making is defined as the degree to which employees are able to influence decisions about their jobs (Teas et al., 1979). It is believed that employees who participate in decision-making which affects them will experience less role conflict and role ambiguity than otherwise.

Teas (1980) and Teas et al. (1979) have shown that salesmen who participate in decision-making do report a greater degree of role clarity (less role ambiguity). Both Kelly and Hise (1980) and Teas (1983) reported a negative relationship between participation and both role conflict and role ambiguity.

Based on the empirical findings summarised above it is hypothesised that:

H<sub>17</sub>: Participation in decision-making exerts a negative influence on role ambiguity

H<sub>18</sub>: Participation in decision-making exerts a negative influence on role conflict

### Participation in decision-making and job satisfaction

At least one study found that participation in decision-making is not significantly related to job satisfaction (Teas and Horrell, 1981). Teas (1980), however, found a direct positive relationship with intrinsic job satisfaction and a positive indirect relationship with extrinsic job satisfaction. Hackman and Lawler (1971) found a positive relationship only in respect of those respondents who reported a low level of higher order need.

Due to the inconsistent findings reported above it is hypothesised that:

H<sub>19</sub>: Participation in decision-making does not influence extrinsic job satisfaction

H<sub>20</sub>: Participation in decision-making does not influence intrinsic job satisfaction

### Communication and role stress

Communication refers to both the extent (frequency) to which management communicates with subordinates and the degree to which subordinates believe they are properly informed regarding aspects of the job affecting them. It is believed that the more frequently and effectively supervisors communicate with their subordinates the more accurate will their assessment of what is expected of them be, that is, the lower the role ambiguity experienced. Frequent communication will also afford employees the opportunity to convey to superiors the

nature and extent of extraordinary demands placed on them by, for instance, customers. As superiors may use the information to assist subordinates in accommodating unusual requests without transgressing organizational rules, it is hypothesised that frequent communication is likely to reduce role conflict (Walker et al., 1975).

Rizzo et al. (1970) found a negative relationship between superior-subordinate communication and role ambiguity, while Behrman and Perreault (1984) found that communication frequency does not reduce role ambiguity.

Based on the limited empirical findings summarised above, it is hypothesised that:

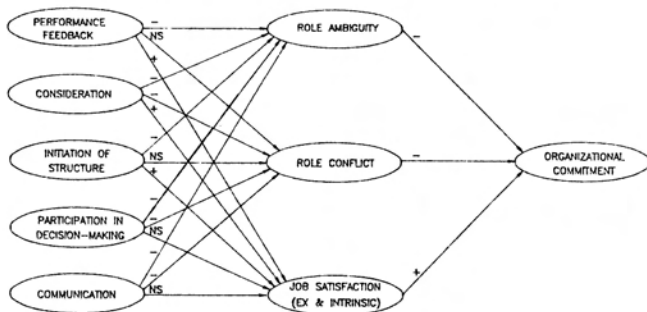
- H<sub>21</sub> : Communication exerts a negative influence on role ambiguity  
 H<sub>22</sub> : Communication exerts a negative influence on role conflict

### Communication and job satisfaction

As Churchill, Ford and Walker (1976) have found that the amount of communication received by employees has no influence on job satisfaction, it is hypothesised that:

- H<sub>23</sub> : Communication does not influence extrinsic job satisfaction  
 H<sub>24</sub> : Communication does not influence intrinsic job satisfaction

The preceding literature review, on which the hypothesised relationships summarised in Figure 1 are based, shows that some of the constructs have been extensively studied. Most studies have, however, used simple correlation and analyses to analyse the data (De Cottis and Summers, 1987; Johnston et al., 1990; and Sager and Johnston, 1989 being exceptions), and these do not permit the analysis of simultaneous variations in other variables (Walker et al., 1975). In addition, the causal relationships between organizational commitment and its antecedents have not been properly evaluated (Bateman and Strasser, 1984) This study attempts to address these limitations.



### RESEARCH OBJECTIVES

The research objectives addressed in this study are:

- RO1: The compilation of a measuring instrument to measure supervisory behaviour, organizational commitment, job satisfaction and role stress of a sample of employees of a non-profit organization.  
 RO2: An assessment of the reliability of the measuring instruments compiled in RO1.  
 RO3: An explorative investigation to establish whether or not the individual items generated by the instrument in RO1 represent measurements of the various latent variables referred to in H<sub>1</sub> to H<sub>24</sub> (organizational commitment, job satisfaction, role conflict, role ambiguity, participation in decision-making, supervisory consideration, initiating structure, performance feedback, and communication).

RO4: Fitting the theoretical causal model in Figure 1 to empirical data in order to enable statistical inferences to be made from hypotheses H<sub>1</sub> to H<sub>24</sub>.

## METHODOLOGY

### Measuring instruments

To measure organizational commitment, the short version of the Mowday, Steers, and Porter's (1982) Organizational Commitment Questionnaire was used. The reliability and validity of the instrument were proved by both the developers and confirmed during subsequent use (Curry, Wakefield, Price and Mueller, 1986; Pierce and Dunham, 1987). Job satisfaction was measured with a nine-item questionnaire, originally developed by Johnston (1955) and as used by Lucas, Babakus, and Ingram (1990). The instrument measures both extrinsic and intrinsic job satisfaction and Lucas et al. (1990) found it to be reliable.

Performance feedback was measured by a five-item instrument and participation in decision-making with a four-item scale which was adapted from the Porter-type response scale used by Teas et al. (1979), and linked to a five-point Likert-type scale. Respondents could indicate strong agreement with each statement by marking a 5, and strong disagreement by marking a 1. Teas et al. (1979) reported Cronbach alpha values of 0,86 (performance feedback) and 0,82 (participation) respectively for the Porter-type scale. Supervisory consideration and initiating structure were measured with instruments originally developed by House and Dessler (1974) and successfully used by Teas and Horrell (1981) who reported Cronbach alpha values of 0,82 and 0,53, respectively. Communication was measured with a four-item instrument adapted from Behrman and Perreault (1984). Two of the items concern the frequency of communication and two items the degree to which employees are properly informed by management about job aspects affecting them.

Role conflict was measured by means of an eight-item questionnaire adapted from the original instrument developed by Rizzo, et al. (1970). Only the eight items with factor loadings greater than 0,5 in the original study were retained. Role ambiguity was measured with a five-item instrument from the same researchers. The cut-off point of factor loadings for items to be retained was, in this instance, 0,4.

### The sample

To test the hypothesised relationships, questionnaires were mailed to a sample of employees of a multiple location non-profit organization. A random sample of 450 employees were selected from the organization's pay roll after a random start. A letter setting out the objectives of the study and a reply-paid envelope accompanied each questionnaire. In total 197 completed questionnaires were received, representing a response rate of 43,7%.

### Statistical methods

Path analysis (also known as structural equation modelling) is a useful statistical tool for evaluating the relationships among a set of variables and has been used by a number of authors to analyse models related to organizational commitment (DeCottis and Summers, 1987; Johnston et al., 1990; Sager and Johnston, 1989). Although these authors used validated measuring instruments to measure the various constructs incorporated in their models, each construct (such as organizational commitment and performance feedback) was treated as manifest (observed) rather than latent variables. In addition, they did not report any results obtained from a factor analysis of the questionnaire items which were used as measurements of the various constructs.

This study differs from previous studies in the sense that constructs such as role ambiguity, role conflict, communication, and job satisfaction are regarded and treated as latent variables.

Cronbach alpha coefficients were used to assess the reliability of the measuring instruments to address the second research objective of this study. The third research objective was addressed by means of unrestricted factor analysis, while path analysis with latent variables was used to address the fourth and final research objective.

**THE EMPIRICAL RESULTS**

**Reliability**

To evaluate the reliability of the measuring instruments, a Cronbach's alpha coefficient was calculated for each scale used. As shown in Table 1, the values for all the instruments are above 0,7 which is regarded as an acceptable minimum level for further analysis (nunnally 1978). The only exceptions were initiating structure and communication which returned coefficients of 0,57 and 0,52 respectively. These low alpha values necessitated their exclusion from the hypothesised causal model and subsequent analyses (see Figure 2).

**TABLE 1  
CRONBACH COEFFICIENTS OF INSTRUMENTS**

INSTRUMENT	CRONBACH COEFFICIENT
Performance	0,94
Organizational commitment	0,90
Performance feedback	0,81
Supervisory consideration	0,85
Initiating structure	0,57
Participation decision-making	0,82
Communication	0,52
Role conflict	0,83
Role ambiguity	0,72

**Factor analysis**

To establish whether each item was indeed a measure of the various constructs as the literature suggests, the data were factor analysed. The correlation matrix of the 47 items measuring performance feedback (PF), consideration (C), participation in decision-making (PA), role conflict (RC), and role ambiguity (RA), job satisfaction (JSAT), and organizational commitment (OC), was subjected to a maximum likelihood factor analysis. The computer programme BMDP4M (Frane, Jennrich and Sampson, 1990) was used by specifying a Direct Quartimin oblique rotation of the original factor matrix (Jennrich and Sampson, 1966). The extraction of seven factors was specified.

The resultant empirical factor structure was used to fit the hypothesised causal model to the data using the computer programme RAMONA (Browne and Mels, 1990). This initial evaluation revealed that the hypothesised model performed worse than the saturated model. This necessitated a reconstruction of the model by deleting insignificant paths, as suggested by Kerlinger and Pedhazur (1973). As initial analyses revealed that extrinsic job satisfaction (EJS) and consideration (C) do not influence organizational commitment, these constructs and their associated paths were deleted from the hypothesised model.

The data were then again factor analysed to address RO3 for the remaining constructs by specifying the same options as before. The resultant six factor structure reported in Table 2 shows that the role ambiguity items (RA1-RA5) did not load on a separate interpretable factor, while the construct performance feedback (PF1-PF5) loaded on two separate factors. The one, measured by items PF2 and PF3, was termed intrinsic performance feedback as these items measure the employees' own evaluation of their performance rather than any outsider's evaluation. The other, extrinsic performance feedback (measured by items PF1, PF4 and PF5), relies to some

extent on the evaluation of a manager or supervisor. It is also evident from Table 2 that respondents appear to have interpreted item IJS3, "My job performance improves from year to year", in the same manner as the items which were regarded as measurements of intrinsic performance feedback, namely item PF2 "I know whether I am performing my job well or poorly" and item PF3 "The results of my work are clearly evident". Item IJS3 was therefore regarded as a measure of intrinsic performance feedback.

**TABLE 2  
ROTATED FACTOR LOADINGS<sup>1</sup>**

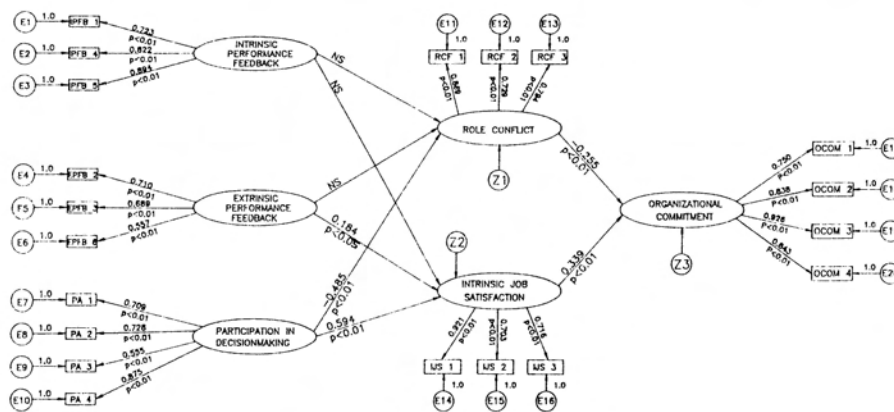
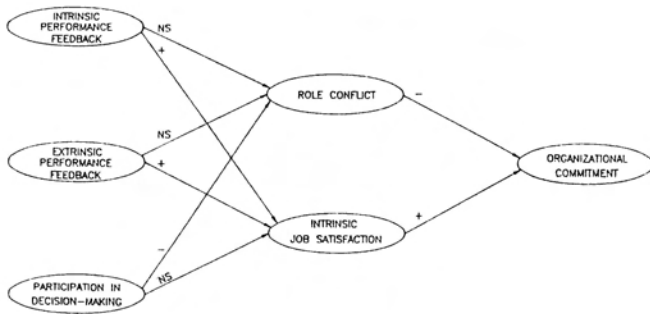
	FACTOR 1 OC	FACTOR 2 RC	FACTOR 3 PA	FACTOR 4 IJS	FACTOR 5 IPF	FACTOR 6 EPF
OC1	0,490	0,139	-0,009	-0,036	0,129	-0,044
OC2	<u>0,752</u>	-0,027	-0,069	0,136	-0,111	0,137
OC3	<u>0,615</u>	-0,036	-0,090	0,051	0,029	-0,099
OC4	<u>0,649</u>	-0,082	0,105	-0,055	-0,067	0,202
OC5	<u>0,773</u>	-0,113	-0,161	0,057	-0,159	0,159
OC6	<u>0,655</u>	-0,153	-0,064	0,064	0,114	0,169
OC7	<u>0,752</u>	-0,101	0,061	0,081	0,005	-0,011
OC8	<u>0,658</u>	0,072	0,034	0,114	0,062	-0,175
OC9	<u>0,825</u>	-0,102	0,055	-0,111	-0,020	0,063
RC1	-0,060	<u>0,690</u>	-0,079	0,100	0,054	-0,075
RC2	-0,025	<u>0,575</u>	-0,181	-0,084	0,127	-0,012
RC3	0,003	<u>0,436</u>	-0,014	0,068	-0,117	0,041
RC4	-0,032	<u>0,666</u>	0,287	-0,152	0,042	-0,042
RC5	0,052	<u>0,433</u>	-0,083	-0,109	0,000	-0,110
RC6	-0,060	<u>0,660</u>	-0,060	0,121	-0,069	0,024
RC7	-0,065	<u>0,559</u>	0,009	-0,051	-0,049	0,002
RC8	0,038	<u>0,520</u>	-0,182	-0,199	-0,086	-0,019
RA1	-0,005	-0,316	0,243	0,123	0,258	-0,071
RA2	0,029	-0,051	0,095	0,366	0,207	0,142
RA3	0,106	-0,009	0,036	-0,151	0,409	-0,009
RA4	0,128	-0,198	0,164	0,203	0,424	-0,063
RA5	0,107	-0,288	0,223	0,045	0,357	0,072
PA1	-0,108	0,003	<u>0,646</u>	0,171	0,125	0,016
PA2	0,048	-0,037	<u>0,675</u>	0,023	-0,014	0,138
PA3	0,150	0,143	<u>-0,536</u>	-0,062	0,116	-0,087
PA4	0,104	-0,072	<u>0,578</u>	0,193	0,087	0,189
PF1	0,033	-0,038	0,129	0,046	0,184	<u>0,525</u>
PF2	-0,111	-0,017	-0,028	0,021	<u>0,671</u>	0,153
PF3	0,044	0,064	0,045	-0,023	<u>0,613</u>	0,221
PF4	0,133	-0,039	0,187	-0,034	0,050	<u>0,669</u>
PF5	-0,010	0,033	-0,035	0,110	0,158	<u>0,880</u>
IJS1	0,114	0,028	0,253	<u>0,599</u>	0,136	0,131
IJS2	0,058	0,005	-0,028	<u>0,858</u>	0,012	-0,066
IJS3	-0,030	-0,103	-0,099	0,140	<u>0,525</u>	0,008
IJS4	0,126	0,005	0,160	<u>0,622</u>	-0,072	0,136

1) Loadings > 0,5 were considered significant. OC = organizational commitment; IJS & EJS = intrinsic and extrinsic job satisfaction; PA = participation in decision-making; RC = role conflict; IPF = intrinsic performance feedback; EPF = extrinsic performance feedback.

Although the remaining items loaded as expected, some items did not reach the cut-off level of 0,5. These results are summarised in Table 3 by means of an empirical factor structure to be used for causal modelling. This structure was used to construct the model depicted in Figure 2 by means of a path diagram.

**TABLE 3**  
**EMPIRICAL FACTOR STRUCTURE FOR PATH ANALYSIS WITH LATENT VARIABLES**

LATENT VARIABLE	MEASUREMENTS
Organizational commitment	OC 2,3,4,5,6,7,8,9
Intrinsic job satisfaction	IJS 1,2,4
Role conflict	RC 1,2,4,6,7,8
Intrinsic performance feedback	PF 2,3, & IJS 3
Extrinsic performance feedback	PF 1,4,5
Participation in decision-making	PA 1,2,3,4



$$OCOM1 = (OC2 + OC3)/2; OCOM2 = (OC4 + OC5)/2; OCOM3 = (OC6 + OC7)/2; OCOM4 = (OC8 + OC9)/2.$$

$$RCF1 = (RC1 + RC2)/2; RCF2 = (RC4 + RC6)/2; RCF3 = (RC7 + RC8)/2.$$

**MEASURES OF FIT OF THE CAUSAL MODEL**

The measures of fit of the model depicted in Figure 3 are shown in Table 4. Neither the Chi-squared test statistic value nor the 90% confidence interval for the population discrepancy function value suggest that the model provides a perfect fit to the data. The fact that the Root Mean Square Error of Approximation (RMSEA) value of 0,069 is less than 0,08 and the modified Akaike's Information Criterion (AIC) for the model is less than that of the saturated model, suggests however, that the model does provide a reasonable fit to the data (Steiger and Lind, 1980; Browne and Mels, 1990).

**TABLE 4**  
**MEASURES OF FIT OF THE CAUSAL MODEL IN FIGURE 3**

Sample Size	Test statistic	Df	Exceedance probability
197	306,81	196	0,000
Sample discrepancy function value		=1,565	
90% confidence interval		=(0,852-2,359)	
Root Mean Square Error of Approximation		=0,069	
90% confidence interval		=(0,057-0,080)	
Cross validation index (modified AIC)		=2,086	
Modified AIC for saturated model		=2,148	

**Path analysis with latent variables**

To address RO4, the causal model depicted in Figure 2 was fitted to the observed data, using the computer programme RAMONA (Browne and Mels, 1990), by specifying an analysis based on the sample correlation matrix with maximum likelihood estimation. Figure 3 shows the resulting maximum likelihood estimates with their associated significance information in terms of P values.

According to Figure 3, intrinsic job satisfaction has a strong positive influence (point estimate = 0,339;  $p < 0,01$ ) on the organizational commitment of respondents. Role conflict, on the other hand, exerts a significant negative influence on organizational commitment (point estimate = -0,255;  $p < 0,01$ ).

Furthermore, the results in Figure 3 suggest that, of the supervisory behaviours included in this study, participation in decision-making represents a particularly important cause of both intrinsic job satisfaction and role conflict. This is evident from the fact that the point estimate of its influence on both intrinsic job satisfaction (0,594;  $p < 0,01$ ) and role conflict (-0,485;  $p < 0,01$ ) are significant. In both instances, the influence is in the hypothesised direction. The point estimate of the influence of extrinsic performance feedback on intrinsic job satisfaction is 0,184 ( $p < 0,05$ ), while intrinsic performance feedback does not exert a significant influence on any of the intervening variables.

**MANAGERIAL IMPLICATIONS**

This study has shown that managers can enhance the organizational commitment of their subordinates to a considerable degree by ensuring that the job aspects related to intrinsic job satisfaction are perceived favourably. These include deriving satisfaction from the work itself (rather than its fruits) and pride in work accomplishment. In addition, by avoiding the harmful effect of role conflict such an effort could be given added impetus. In other words, by ensuring that subordinates do not have to face situations where incompatible job demands are being placed on them, the favourable outcome of having committed employees is likely to bear fruit (possible enhanced job performance) and the negative consequences (turnover, absenteeism) are likely to be avoided.

A managerial approach which will contribute considerably to achieving this objective is participation in decision-making. Allowing subordinates to be involved in decisionmaking which affects their jobs, will enhance intrinsic job satisfaction, and simultaneously reduce role conflict.

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