A measure of role innovation at work

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Role innovation, the introduction of new behaviours into a role, is of interest to both social psychologists (e.g. Brim, 1958, 1960; Bandura, 1971, 1977; Turner, 1978) and occupational/organizational psychologists (e.g. Schein, 1971a, b, 1978; Nicholson, 1984). The concept is particularly important for occupational psychology in focusing attention on the dynamics of change in organizations but it also has clear importance in social psychology. However, even within occupational psychology no measure of role innovation is currently available. The present paper describes a measure of role innovation and provides details of its reliability and validity.

How is role innovation conceived by various writers? Bandura (1971) uses the term ‘creative modelling’ to describe role innovation and argues that there is a tendency for role incumbents to stay close to the behaviour of an observed model. He suggests that role innovation is likely to occur when none of the previously observed role behaviours has a sufficiently high anticipated profit to make it desirable. In such cases ‘observers generally exhibit relatively more responses representing amalgams of elements from different models’ (Bandura, 1971).

Brim’s work (1958, 1960) suggests that amalgamation (combining behaviours of different role models) is not the only form of role innovation and that people often transfer behaviours from one role to another. This occurs through (1) role assimilation, e.g. an older child who acts towards her sibling as she has seen her parents do; and (2) role extension, e.g. a child who acts towards his teacher as he has learned to act towards his parents.

Turner (1978) describes an extreme case of role innovation as resulting from ‘role-person merger’ in which a single role becomes so central that the actor is inclined to use it in a wide variety of situations, thereby role innovating in those new situations.

In the organizational setting Schein (1971a, b, 1978) has drawn attention to the possibility of organizational change through the role-innovative behaviours of new job incumbents. Nicholson’s (1984) theory of work-role transitions extends this notion and offers predictions about role innovation in organizations based on a knowledge of prior occupational socialization, motivational orientation, organizational induction/socialization processes and role requirements. Nicholson describes role innovation as initiating ‘changes in task objectives, methods, materials, scheduling, and in the interpersonal relationships integral to role performance’.

The study was designed to operationalize this conception by testing a measure previously shown to have good internal reliability (West et al., 1987) in a questionnaire survey of 1100 British managers. The need to test this measure using external criteria is met by using a secondary sample to evaluate the validity of subjectively perceived innovation.

The measure

Subjects are asked to indicate in what ways they do their jobs differently from the person(s) who did the job before them or others currently doing this job in their organizations in relation to six areas:

A Setting work targets/objectives
B Deciding the methods used to achieve work targets/objectives
C Deciding the order in which different parts of the job are done
D Choosing whom you deal with in order to carry out your work duties
E Initiating new procedures or information systems
F Developing innovative ways of accomplishing targets/objectives

Subjects are asked to indicate on a four-point scale whether they do the job ‘much the same as other people have done it’, ‘somewhat differently than others have done it’, ‘very differently than others have done it’ or ‘completely differently than others have done it’. A ‘don’t know’ response category is available if subjects ‘have absolutely no idea how the job has been done’.

(a) Reliability. In a questionnaire survey (West et al., 1987), involving 1100 male and female British managers of the reliability of the scale using Cronbach’s alpha was found to be 0.84 (mean = 13.44,
There were no significant sex differences. A previous survey of 2304 male and female British managers using only the first four items in the scale gave a reliability coefficient of 0.82 (mean = 8.57, SD = 2.31, West, 1986). In a survey of 145 student nurses (Rushton, 1985), role innovation was measured using an adaptation of the items and this scaled to give a reliability of 0.82 (mean = 10.0, SD = 3.72).

(b) Validity. Twenty part-time students attending a Diploma in Management Studies (DMS) course and 17 supervisory-level staff from two organizations in the wool textile industry were asked to complete this scale in relation to the performance of their duties in their jobs. All had changed jobs within the previous year. The organizations from which the Diploma in Management students were drawn included pharmaceuticals manufacture, national library, engineering department of a local authority, public utility (gas), group/incentive travel service, health services, local authority social services, and banking. In addition to the role innovation scale the questionnaire included a five-item measure of job discretion, previously shown (West, 1986) to have high internal reliability (alpha = 0.93). Respondents were also asked to indicate job areas and details of their most recent job moves. They were asked to return the questionnaires anonymously in pre-paid envelopes provided. They were also asked to hand to their immediate supervisors a sealed envelope, containing questionnaires asking supervisors to rate the original respondents on identical scales of role innovation and job discretion. Respondents were requested not to consult with or advise their bosses on answers. Fifteen DMS students and 15 supervisors from the wool textile industry and their respective superiors completed the questionnaires, representing a response rate of 81.1 per cent.

Responses of supervisors and subordinates were linked by code number enabling statistical comparisons to be made when they were returned. Mean scores on the role innovation scale were 14.43 (target respondents) and 13.70 (target respondents rated by supervisors). Standard deviations were 4.32 and 5.36 respectively.

Table 1 shows the pattern of intercorrelations (using the formula for Pearson's correlation coefficient) between supervisor and respondent ratings of job discretion and role innovation. The significant correlation between supervisor and respondent ratings of role innovation suggests that the measure has external validity and is not simply a function of the incumbent's perceptions. Correlations for the two samples separately were both significant, though that for the wool textile industries was borderline (DMS students and supervisors: \( r = 0.56, P = <0.05 \); wool textile industries workers and supervisors: \( r = 0.44, P = 0.05 \)). There is a high and significant correlation between individual perceptions of discretion and role innovation, confirming previous findings (West, 1986) and theoretical predictions (Nicholson, 1984) that role innovation is most likely to occur in jobs which have high perceived levels of discretion.

Our previous research has established the robustness of the internal reliability of the measure of role innovation and, though the sample is small, this validity study now provides some confidence in its external validity. As an operationalization of a theoretically important construct, this measure is of value to both researchers and practitioners concerned to understand the dynamics of change in organizations.

| Table 1. Intercorrelation between supervisors' and individuals' ratings of job discretion and role innovation |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Individual ratings                              | Supervisor ratings                              |
| Job discretion                                 | Role innovation                                | Job discretion                                 | Role innovation                                |
| Individual ratings:                             |                                                 |                                                 |                                                 |
| Job discretion                                 | 0.57***                                        |                                                 |                                                 |
| Role innovation                                |                                                 |                                                 |                                                 |
| Supervisor ratings:                             |                                                 |                                                 |                                                 |
| Job discretion                                 | 0.63***                                        | 0.50**                                         |                                                 |
| Role innovation                                | 0.37*                                          | 0.54**                                         | 0.65***                                        |

\*P = <0.05; \**P = <0.01; \***P = < 0.001.
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References


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