PERFORMANCE APPRAISAL FOR COMMUNITY HEALTH NURSES THROUGH SELF-APPRAISAL AND GOAL SETTING
L. J. Knox • R. C. MacKay

INTRODUCTION
Evaluation of nursing performance is a difficult and complex task in any health care setting. Like anyone whose work is being questioned, nurses tend to feel defensive. They often respond to their supervisors’ criticisms by trying to protect themselves and their work methods. In community health nursing there is an additional problem... the supervisor has infrequent opportunities to observe the nurse in action. In the past, supervisors have relied heavily on written records of nursing actions to evaluate performance. As more research into this area of practice is completed, it is becoming clear that there are a number of problems to overcome. Supervisors have difficulty in agreeing on the rating to be given a nursing record (Engle & Barkauskas, 1979), and the assumption that written records accurately reflect nursing performance has itself been questioned (Koerner, 1981). The future must bring a fresh approach. We need to move from a judgmental evaluation of records to a developmental appraisal of nursing behaviours. We need to focus on future goals rather than past omissions. Most important, we need to trust nurses to accept accountability for their own professional behaviour.

WHY SELF-APPRAISAL AND GOAL SETTING?
Nursing personnel are frequently in short supply, and nurses continue to leave the profession, often citing the scarcity of professional growth opportunities. It is increasingly essential for nurse managers to appraise nursing performance in a way which motivates nurses to utilize their full potential, to maximize their productivity, and to develop as professionals. One method which is receiving increased attention is self-appraisal. Particularly when it is combined with goal setting, self-appraisal has potential for stimulating improved work performance and professional growth.

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Self-appraisal, goal setting, and accountability are essential for professional growth. They provide an opportunity to emphasize achievements, to encourage initiative and originality, and to focus on future growth rather than past errors. Self-appraisals which are based on a specific description of criterion behaviours also clarify what is expected of professionals in their role.

THEORETICAL FRAMEWORK

By adapting the ideas of others, a theoretical framework has been developed in which self-appraisal and goal setting are components of a model of performance (Locke, Cartledge, & Kneer, 1970; Cummings & Schwab, 1973; Bandura, 1978). This model combines ability and motivation as determinants of performance (Figure 1). Performance results in organizational outcomes such as productivity and contributions to the organizational climate, and in intrinsic outcomes for the individual such as job satisfaction. For the individual, initial feelings about one's performance may lead to the cognitive process of self-appraisal.

For some individuals, self-appraisal and goal setting are most likely to occur when they are less than satisfied with their performance. However, individuals who are accustomed to a structured self-appraisal process also tend to use it to analyze situations in which they were pleased with their performance. In this way they identify successful behaviours which can be used again in appropriate future situations. This identification of strengths as well as weaknesses may be one of the factors which motivate individuals to use the self-appraisal and goal setting process regularly. It is also the key in promoting a consistently higher level of performance.

Effective self-appraisal is neither a simple nor an automatic process. Bandura (1978) describes it as involving: a) self-observation, b) evaluation or comparison of one's own performance to a standard of performance, and c) self-evaluative reaction, for example a feel of satisfaction. The performance standard to which these self-observations are compared may be based on social comparison with other individuals or groups, comparison with one's own previous performance, or comparison with an objective standard such as a list of behaviours. The organization has many opportunities to influence an individual's self-appraisal. For example, the role model provided by the supervisor enables one type of social comparison while written standards of practice provide an objective standard.
Comparison of one's performance to a standard results in a self-evaluative reaction which may be neutral, positive or negative. This response is largely determined by one's personal standards, how highly one values the activity, and whether or not one feels responsible for one's own actions (Bandura, 1978).

Self-appraisal can result in satisfaction with one's performance and consequent maintenance of motivation to perform at the same level. Dissatisfaction can be a discouraging factor which lowers motivation to perform, or it can lead to determination to improve one's performance. This intention to do better or to change in some way is called goal aspiration. In the context used here it is developed as a general statement and usually includes the reason why the individual wants to change. For example, nurses may want to improve their communication skills so as to become more effective in their work. Since a goal aspiration does not state specifically what change is desired, it is
unlikely to be a strong motivating force. However, if the goal aspiration is translated into a more specifically stated performance goal during the goal setting process, then motivation towards behaviour change can result (Latham & Wexley, 1981, p. 148) (Figure 1).

The performance goal identifies the desired behaviour change in measurable terms. It specifies the “who, what, when, where”, and states “how much” will be required for the behaviour change to be considered successful. In this way the performance goal not only provides direction and motivation for change, it also facilitates the individual’s evaluation of progress toward the goal (McAshan, 1974, p. 27).

This model of performance represents an open system interacting with the larger organizational and environmental systems. It demonstrates the complexity of performance within today’s rapidly changing world. Only the organizational influences will be discussed here. Cummings and Schwab (1973, pp. 48-49, 60-64) suggest that there are many ways in which the organization can influence an individual’s performance. The personnel selection process, orientation procedures, and opportunities for continuing education can each have an effect on the ability of individuals to perform. The design of the tasks to be performed, and the way in which the organization describes these tasks will have a direct impact on performance. Organizations having participative developmentally oriented performance appraisal systems, can alter the meaning of performance for individuals, and the way they feel about the task itself. That is, the appraisal system influences the intrinsic outcome of performance and the consequent self-appraisal (Figure 1).

When an organization rewards or punishes behaviour, it is influencing the self-appraisal process. In a similar way, anything which clarifies the organization’s expectations of its employees, will influence self-appraisal. A self-appraisal tool with specifically stated behavioural criteria provides one way of clarifying performance expectations. Such a tool also influences the goal aspiration component of the model, in that behaviours itemized on the tool are seen by some individuals as potential goals. Goal aspiration can also be influenced by participation in decision making, and by organizational factors which determine the likelihood of achieving difficult goals. For example, nurses who participate in the decision to develop a new procedure, or who contribute to its development, are more likely to aspire to become skilled at using the procedure. Organizational factors such as the supportiveness of the supervisor can also facilitate goal achievement. In addition, supervisory assistance or written instructions in setting specific performance goals can have an impact on
motivation and thus on performance. That is, individuals are more likely to be motivated to achieve difficult performance goals if they are specific, time limited, behavioural statements.

Finally, the organization can influence an individual’s performance by providing incentives such as financial rewards or promotions. Both Locke (1968) and Terborg (1976) suggest that goal setting acts as a mediator between incentives and the individual’s level of performance. A feedback loop in the model suggests that incentives which are intended to be motivating, may lead individuals to self-appraise their potential for attaining the proposed goal. An individual’s willingness to aspire to the proposed goal will determine, at least in part, the potency of the incentive as a motivator for that individual at that time. Thus the motivating influence of the incentive is mediated by the cognitive process of self-appraisal and goal setting.

PURPOSE OF THE RESEARCH

A pilot study was designed to evaluate a portion of the theoretical model (Figure 1). In general, its purpose was to determine whether there was a relationship between the use of a self-appraisal tool and the independent goal setting behaviour of community health nurses. The literature review pointed to the usefulness of an objective list of standard behaviours against which one could compare oneself. A published list of behaviours specific to community health nursing was not found. As a result, a descriptive list of specific behaviours which are representative of current community health nursing practice was developed and pre-tested in Alberta. Detailed goal setting instructions were added. This self-appraisal tool and accompanying goal setting instructions became the focus of the study.

Study Questions

More specifically the study was designed to answer three questions. First, are there demographic factors which are related to the self-appraisal and goal setting behaviour of community health nurses? Second, when comparing the scores of nurses who use the tool to those who do not, does the use of the self-appraisal tool significantly increase a) the specificity of performance goals, or b) the job relatedness of performance goals, or c) the acceptability of the goal setting process? Third, is this self-appraisal tool valid and reliable, and what are its psychometric properties?

STUDY DESIGN

Participants were assigned at random to either experimental or control condition. The independent variable was the use of the self-appraisal tool (described in more detail later in this article). The con-
trol group was asked to self-appraise their performance and set goals without using the tool. Both groups received the goal setting instructions. The dependent variables to be assessed were the acceptability of the self-appraisal and goal setting process, the specificity of the goal which was set, and the job relatedness of the goal which was set. During the 10 week study period, these were measured for all participants both before and after the self-appraisal process. Using these pre-appraisal and post-appraisal measures, findings in the experimental group were compared to those in the control group.

The degree of acceptability of the self-appraisal and goal setting process was ranked from 1 to 4, based on the number of the following criteria present. The first criterion was the statement of at least one performance goal. Second, participants described themselves as at least "moderately" committed to the accomplishment of their performance goal (a five point scale ranged from highly to not committed). Third, content analysis of responses to open ended questions revealed at least two positive statements about the self-appraisal and goal setting process, e.g. necessary, interesting. Knowles (1975, pp. 81-89) suggests that most adults are willing to invest energy toward improving their performance of only a few selected behaviours at any one time. Thus it was not anticipated that participants would state very many performance goals. The fourth criterion however was the statement of more than one performance goal. None of the above criteria was considered to measure acceptability alone. In combination, these four criteria provided an operational definition of acceptability. Participants whose responses satisfied at least three of the criteria were rated as having accepted the self-appraisal and goal setting process.

Goal specificity was defined as the degree to which the performance goal provided direction for its accomplishment. Only the first goal stated was assessed. The specificity of the goal was ranked from 1 to 5 based on the number of required elements within the goal. Elements included in a highly specific performance goal were: whose goal it was, how it was to be accomplished, the success level desired, the situation and/or circumstances in which it was to be performed, and the target date for accomplishment of the performance goal.

Job relatedness of goals was defined as the degree to which goals were clearly related to, or required for, performance of community health nursing. Goals were ranked highly, moderately or slightly job related. Highly job related goals were closely associated with items on the self-appraisal tool. Moderate job relatedness described goals which were judged to contribute directly to community health nursing effectiveness, but which are not associated with tool items. Slightly job related described goals which were judged to be indirectly associated with community health nursing (e.g. time management).
Each of the three variables was rated by one rater after inter-rater reliability was achieved with the independent ratings of another individual. In rating acceptability, 100% agreement was achieved. The rating of specificity of goals was reliable at the .80 level. After nine hours of training, the .72 level of agreement was achieved in rating job relatedness. Scott's coefficient of agreement was used in calculating these inter-rater reliabilities (Krippendorff, 1970). Although this formula may be considered to provide a conservative estimate of reliability, the low levels of inter-rater reliability were viewed as a limitation of the study.

SAMPLE SELECTION AND POPULATION

One hundred nurses were randomly selected from the eligible population of 142 generalist community health nurses employed by the official community health agency in Nova Scotia. Community health nurses employed by voluntary agencies or private companies were not included in the study. Selected participants were assigned a numerical code to assure anonymity, and were provided with a written "agreement of participation" outlining the conditions under which the study was being conducted (anonymity, reporting procedures). Written invitations to participate were mailed to those selected. Nursing supervisors were informed by mail about the study; no personal contact was made.

Unfortunately only 21 nurses sent complete responses to all parts of the study in spite of a planned system of repeated written and phoned reminders. This low response rate may have been descriptive of the low level of interest in self-appraisal and goal setting among Nova Scotia community health nurses or it may have been due to the research methods, including the failure to build in supervisory support for participation in the study. It may also have been circumstantial. For example, there was a major reorganization of districts and caseloads in metropolitan areas one week prior to the introduction of the study. A national mail strike also complicated the method used to return the study materials. Both of these factors would have increased the nurses' work load and influenced their willingness to participate. The small sample gained was evaluated as a pilot study.

Participants were female, aged 20 to 65 with a mean age of 40. For the most part, they worked in non-metropolitan regions of Nova Scotia. Only four of these nurses had less than three years of community health nursing experience; most of them expected to continue working in community health for more than five years. A diploma in public health nursing was the highest level of nursing education achieved by 76%; the remaining 24% possessed a baccalaureate
degree in nursing. Over half of the participating nurses (57%) com-
pleted their last normal nursing education before 1957, more than 24
years ago. The findings of this study should be considered in light of
the size and characteristics of the sample population.

Most participating nurses (81%) indicated at the beginning of the
study that they had goals for improving their performance, and that
they had initiated development of these goals themselves. However,
43% of participating nurses felt that they had only a 50% chance or
less of achieving their goal. Individuals who do not feel they can
achieve their goals are less likely to work towards their attainment
(Latham & Locke, 1979). After using the goal setting instructions,
81% of participating nurses stated that they had a good chance of
achieving their goal. It would appear that simply writing more specific
goals guided these nurses to write more achievable goals. Alternative-
ly it may have enabled them to view their goal in a more positive light.
Goals which are seen as realistic and achievable are more likely to gain
the commitment of the nurse, and thus are more likely to be suc-
cessfully attained.

Although the study population was very small, two factors were
identified as being related to the self-appraisal and goal setting
behaviour of community health nurses. The five participating nurses
with baccalaureate education were more receptive to the self-appraisal
process. They wrote more goals, and were more committed to achiev-
ing their goals. In addition, they were more likely to describe
themselves as feeling positive about the self-appraisal and goal setting
process. Participants who completed their nursing education prior to
1968 were less likely to write specific goals. Presumably they were less
comfortable with this process.

FINDINGS

Self-appraisal and Goal Setting Behaviour

Using the Mann-Whitney U Test, no significant differences were
found between experimental and control groups (Table 1). During this
pilot study the use of a self-appraisal tool over a two week period did
not significantly alter the self-appraisal and goal setting behaviour of
community health nurses.

Changes within each group from pre-appraisal and post-appraisal
measurements were assessed using the Wilcoxon Matched Pairs
Signed-Ranks Test. Both the experimental and the control group
wrote goals which were significantly more specific (p < .01) after
using the goal setting instructions (Table 2). This finding suggests that
goal setting instructions can have an impact on the process of goal set-
ting. Job relatedness of goals increased significantly (p < .05) only in
the experimental group, suggesting that use of the self-appraisal tool encouraged participants to write goals which were more highly job related.

Acceptability of the self-appraisal and goal setting process decreased in both the experimental and control groups, although the decrease was more marked in the control group (Table 2). Both groups of participating nurses wrote fewer goals after using the goal setting instructions. Perhaps writing more specific goals increased their awareness that they were committing themselves to change. An equally possible explanation is that the support of nursing management was not planned as part of the study. In this study, self-appraisal and goal setting were required in addition to the nurses’ usual workload and the agency’s regular process of performance appraisal.

Table 1

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Standard Score</th>
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<tbody>
<tr>
<td></td>
<td>Pre-treatment</td>
<td>Post-treatment</td>
<td></td>
</tr>
<tr>
<td>acceptability</td>
<td>.9025*</td>
<td>.8153*</td>
<td></td>
</tr>
<tr>
<td>specificity</td>
<td>.3131*</td>
<td>.3792*</td>
<td></td>
</tr>
<tr>
<td>job relatedness</td>
<td>1.7824**</td>
<td>1.4308*</td>
<td></td>
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Note. \( a_n = 12, b_n = 9. \)

one-tailed \( p > .05 \) (not significant), \( ** \)one-tailed \( p < .05 \).

Table 2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Group</th>
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<tbody>
<tr>
<td></td>
<td>Experimental (^a)</td>
</tr>
<tr>
<td>acceptability</td>
<td>(-1.677**)</td>
</tr>
<tr>
<td>specificity</td>
<td>(2.803***)</td>
</tr>
<tr>
<td>job relatedness</td>
<td>(2.201**)</td>
</tr>
</tbody>
</table>

Note. \( a_n = 12, b_n = 9; \) one-tailed \( p > .05 \) (not significant), \( ** \)one-tailed \( p < .05 \), \( *** \)one-tailed \( p < .01 \).
The Self-appraisal Tool

The self-appraisal tool tested in this study included 73 items stated in personal and behavioural terms (See Table 3 for examples). Each behavioural item was allocated to one of seven job dimensions associated with giving nursing care: assessing, planning, implementing, and evaluating (the nursing process), teaching, communicating, and developing professional behaviour. The nursing process was chosen as the basis for the tool so as to ensure that all aspects of nursing care were included. Teaching, communicating, and professional behaviours were added to this framework because they were considered particularly critical behaviours for community health nurses. Thus the seven job dimensions provided a framework which encompassed both the science and the art of nursing.

The reliability of the tool was assessed by using Cronbach’s alpha coefficient to estimate internal consistency within each dimension of the tool. Reliabilities ranged from .71 to .95 (n=12) and were considered satisfactory.

Table 3

Sample Items from Self-appraisal and Goal Setting Tool©

In implementing nursing care... I modify care on the basis of ongoing assessments.

I teach my colleagues... by sharing new information.

In furthering my development as a professional... I appraise my nursing performance regularly.

To establish a climate for a helping relationship... I clarify the purpose of the interview.

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The face validity, content validity, and construct validity of the self-appraisal tool were assessed. Face validity was claimed based on input from practising community health nurses in a variety of locations. Content validity was evident in the strong support in the literature for the dimensions included in the tool (ANA, 1980; CNA, 1980; CPHA, 1977; Freeman, 1970; Freeman & Heinrich, 1981; Gazda, Walters, & Childers, 1975; Leahy, Cobb, & Jones, 1977). The nursing process, teaching, and communication have been widely accepted as components of community health nursing for over two decades; more recently professional development has also been viewed as essential (Cooper, 1980, p. 50; O’Connor, 1978, pp. 405-406).
Discriminant construct validity using the "known groups" technique was not successfully demonstrated at this time. The "known groups" used were based on type and date of completion of nursing education (Table 4). In this small study population, these factors did not adequately discriminate among the self-appraisal frequency of performing the nursing behaviours described in the self-appraisal tool. Further assessment of this type of validity will be carried out in a subsequent study, using "known groups" identified by supervisors.

Table 4
Means of Total Scores \(^a\) of Self-appraisal Ratings by "Known Groups" of Public Health Nurses

<table>
<thead>
<tr>
<th>&quot;Known Groups&quot;</th>
<th>Group Mean</th>
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<tbody>
<tr>
<td>&lt; 1 year public health experience (^b)</td>
<td>28.0</td>
</tr>
<tr>
<td>&gt; 1 year public health experience (^c)</td>
<td>28.4</td>
</tr>
<tr>
<td>With 1 year public health experience:</td>
<td></td>
</tr>
<tr>
<td>nursing education 1967-1981(^d)</td>
<td>27.6</td>
</tr>
<tr>
<td>nursing education before 1967(^e)</td>
<td>29.4</td>
</tr>
</tbody>
</table>

Note. \(^a\) Total scores for each case represent the sum of the median scores from each of the seven dimensions on the self-appraisal tool.

\[ \text{Maximum possible total score} = 35, \quad \beta_n = 1, \quad \gamma_n = 20, \quad \delta_n = 11, \quad \epsilon_n = 9. \]

The way in which the tool was used by participants was also assessed. Contrary to the expectations of some administrators, nurses did not tend to be lenient, nor to exhibit central tendency in rating their performance on all dimensions of the tool. The full range of the five point Likert-type frequency scale was used, from "rarely" to "always" perform this behaviour. Participating nurses were also able to recognize their skill in performing one performance dimension from their skill in performing another of the seven dimensions of community health nursing behaviour. That is, in general, their appraisals did not demonstrate a halo effect. Intercorrelations among the total median scores of each dimension of the self-appraisal tool were computed using the Pearson product moment correlation coefficient. With all but two dimensions the correlations were sufficiently low (ranging from .19 to .67) that it was reasonable to assume that the dimensions were measuring unique aspects of community health nursing performance.
The "assessing" and "planning" dimensions of the tool were an exception since they were perfectly correlated \((r = 1, p = .001)\). These two dimensions appeared to overlap, or were perceived by participating nurses to be measuring similar aspects of performance. Subsequent studies will determine whether this was an idiosyncratic response. The lack of halo effect in most parts of the tool supports the literature which predicts that nurses will be more familiar with their work performance than their supervisors. Particularly in community health nursing, the supervisor's appraisal is likely to be overly influenced by the one or two aspects of the nurse's performance with which she is familiar, resulting in the problem of halo effect.

SUMMARY OF FINDINGS

This pilot study examined the self-appraisal and goal setting behaviours of a small sample of Nova Scotian community health nurses working in mainly non-metropolitan areas. Participating nurses appraised their own work behaviour and established performance goals. The appraisals completed were based on a self-appraisal tool and reflected the ability of participating nurses to recognize their relative skill in performing nursing behaviours. Detailed goal setting instructions helped participating nurses to develop highly specific goals which they viewed as being more achievable than goals which they had set previously. These goals were job related, and aimed at improving the performance of nursing skills. The findings of this pilot study suggest that participating community health nurses were able to self-appraise their nursing behaviours, and set goals for improving those behaviours.

Although the reliability, validity, and psychometric properties of this self-appraisal tool were assessed, the small sample size did not allow the investigator to view the findings with confidence. The findings were sufficiently positive however to encourage further research.

SUBSEQUENT STUDY

In the course of this pilot study, four factors having major implications for subsequent studies were identified. First, it was felt that the validity, reliability and psychometric properties of the self-appraisal tool needed to be demonstrated more firmly before more complex studies involving the use of the tool were undertaken. A subsequent study now under way in Alberta does not attempt to assess the complex relationships between self-appraisal and goal setting; rather, it is focused on the self-appraisal tool. Only minor changes were made in the tool prior to using it in the subsequent study.

28
Second, it seemed clear that nursing supervisors would need to be involved a) by being knowledgeable about the self-appraisal and goal setting process, b) by endorsing study participation as a legitimate activity for community health nurses, and c) by identifying community health nurses thought to be highly skilled. As a result, the Alberta study required the attendance of nursing supervisors at a two hour workshop. During the workshop the investigator explained the process of self-appraisal and goal setting, and described the study. Nursing directors and supervisors committed themselves to participate and also undertook to encourage their community health nurses to participate.

Third, a much larger study population appeared essential. Although it was felt that nursing supervisor involvement would improve the response rate, the subsequent study attempted to gain the participation of the total community health nursing population in Alberta.

Fourth, the pilot study findings suggested that some demographic factors, including type and recency of nursing education, might influence the self-appraisal process. Analysis of selected demographic factors is planned in the Alberta study.

CONCLUSION

The pilot study reported here suggested that self-appraisal and goal setting may be a viable process for community health nurses. Both the literature review and these preliminary findings indicate that a specific list of behaviours representative of community health nursing may be useful in focusing the self-appraisal process. Detailed goal setting instructions appeared to assist nurses in writing highly specific goals. However, no firm conclusions can be drawn from this small pilot study except to suggest that further study is required. A subsequent study focusing on the self-appraisal tool is now under way in Alberta.

REFERENCES


RÉSUMÉ

Évaluation de rendement des infirmiers en santé communautaire par l'auto-évaluation et la formulation d'objectifs

Il arrive trop souvent que l'évaluation de la qualité du travail soit à l'origine d'un comportement défensif plutôt que de l'amélioration du rendement professionnel. Lorsqu'on associe l'auto-évaluation à la formulation d'objectifs, les infirmiers sont mieux en mesure d'identifier leurs besoins d'améliorer la qualité de leur travail et de demander l'appui de leurs supérieurs pour faire face à ces besoins. Le présent article décrit une étude pilote concernant le processus d'évaluation du rendement chez des infirmières en santé communautaire et il fait appel à l'utilisation d'un outil d'auto-évaluation ainsi qu'à des instructions relatives à la formulation d'objectifs.

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