HEALTH PROMOTION INTERNATIONAL
© Oxford University Press 1994

Vol. 9, No. 3
Printed in Great Britain

'Naturally Smoke Free': a support program for facilitating worksite smoking control policy implementation in Sweden

LINDA GEARHART PUCCI
Boston Department of Health and Hospitals, Boston, MA, USA

BO HAGLUND
Karolinska Institute, Department of International Health, Stockholm, Sweden

SUMMARY

This paper describes events and experiences of a politically mandated support program designed to facilitate adoption and implementation of smoking control policies at public sector worksites in Stockholm, Sweden. The support program utilized a three-pronged community organization strategy including informational, enabling and training components. Participation in the program and implementation process was monitored at all public sector worksites including the 17 human service districts. In-place health promotion programs and organizational climate were also assessed using semi-structured interviews with key informants at the human service districts. Sixteen of the 17 districts had adopted smoking control policies (designated smoking areas) at the close of the program. A parallel tendency was observed for policy implementation and health promotion, i.e. generally the high-ranking districts for implementation also ranked high for health promotion. No linkages were noted for organizational climate. Follow up shows occupation-specific patterns that may indicate a need for stress reduction components in conjunction with cessation programs and/or worksite smoking control policies. Furthermore, specific tools for assessing organizational climate need to be developed and refined as do strategies and models.

Key words: case study; policy implementation; worksite smoking control

INTRODUCTION

Cigarette smoking continues to be recognized as a major threat to the public's health and a key concern for occupational medicine (Walsh and Engdahl, 1989). Recent evidence suggests that cigarette smoking is a risk to non-smokers as well as smokers, particularly those non-smokers chronically exposed to second hand smoke/side stream smoke (Eriksen *et al.*, 1988). Worksites have become the focus of efforts to restrict smoking for several reasons. Places of employment pose a rise of chronic exposure to environmental tobacco smoke, and toxins in the work environment can interact with tobacco smoke to multiply the risk for certain cancers and respiratory disorders (Committee on Passive Smoking of the National Research Council, 1986; US Department of Health and Human Services, 1986; Repace and Lowrey, 1987; Glantz and Parmley, 1991; National Institute of Occupational Health and Safety (NIOSH), 1991). Urban adults spend more time at work than at any other location except for home. For adults who do not live with smokers, the worksite is the primary source of exposure to environmental tobacco smoke (ETS).

Furthermore, individuals have less choice about their smoke exposure at work than at any other place (Repace and Lowrey, 1985).

This paper chronicles events and experience as the Stockholm City Personnel Policies Administration (POF) conducted a support program aimed at facilitating adoption and implementation of smoking control policies at the City's 17 Human Service Districts during the period May 1988–November 1990. The districts are designated with letters of the alphabet A–Q.

BACKGROUND

National legislation for smoking control

The issue of smoking has long been on the agendas of Swedish legislators. In 1973 the then National Board of Health and Welfare initiated discussions about health hazards associated with smoking. In 1977, a parliamentary tobacco commission recommended smoke-free public places. One year later, in March, the tobacco commission drafted a proposal for smoking legislation. However, legislators were reticent to debate the issue. They 'wanted to wait until the commission had completed its investigation'. When, in 1981, the work was completed, the commission again proposed legislation to regulate smoking in public laces and recommended that other environments including worksites should be smoke-free.

Recommended legislation was tabled but parliament assigned the National Board of Health and Welfare and the National Board of Occupational Health and Safety the task of jointly drawing up guidelines for smoking control in indoor environments. Official guidelines, 'Recommendations for Smoking Control' (Arbetarskyddsstyrelsen och Socialstyrelsen, 1983) were published 23 April 1983 and distributed throughout Sweden. In them we read:

> Designated smoking areas should be established which do not violate non-smokers' right to a smoke-free environment

The parliament allocated monies to finance an information campaign against smoking, but the proposed legislation was never voted upon.

In May 1988, yet another parliamentary tobacco commission was appointed to investigate the status of tobacco control in Sweden. When that tobacco commission completed its work in 1990, it proposed a Tobacco Act (Socialdepartementet, 1990) that would, among other things, ban smoking in all indoor public places including worksites. The proposed legislation would make smoke-free work places mandatory. In the commission's words

> in workplaces ... smoking is only to be permitted in special rooms and private offices if the ventilation is sufficient to prevent smoke from spreading into smoke-free rooms

In addition, the legislative proposal targeted other 'public places' such as schools and health care facilities suggesting a total ban on smoking in these environments. At the time of the current study, the legislative proposal had yet to be debated in parliament.

Stockholm City recommendations for smoke-free worksites

Smoking control policies in the City of Stockholm paralleled developments on the national level. In 1979, the Stockholm city council made recommendations about smoking control in public places (including workplaces). In 1986, Stockholm's Personnel Policies Board (PON) initiated discussion about smoking control at public sector places of employment. PON assigned its administrative agency (POF) the task of assessing the status of smoking control in Stockholm's public sector worksites and recommending policy changes.

A survey was conducted to determine the status of smoking control policy in all municipal agencies and organizations in November 1986. The survey, which was sent to top executives, consisted of a single item asking respondents to describe any smoking policy currently in effect and to provide supporting documents. Of the five human service districts that responded, none had taken steps to restrict smoking in the work place.

The City's central health and safety committee (CAMK), which is comprised of elected officials from the city council, representatives from major municipal agencies and organizations as well as management and labour, began negotiating new recommendations for restricting smoking at the City's worksites. Negotiations were drawn out. When, in May 1988, new guidelines for smoking control were agreed upon, the POF adopted them and recommended that all municipal organizations and agencies follow suit.

Briefly, the adopted policy encouraged prohibiting smoking in all municipal places of employment. In situations where ordinary ventilation did not protect employees from exposure

to ETS, either designated smoking areas with direct external exhaust or a total ban on smoking was recommended. In addition, it was suggested that smoking cessation programs should be made available to employees during working hours whenever smoking restrictions were introduced (Personal-och organizationsförvaltning, 1988).

POF was charged with the task of developing a smoking control program and models that would facilitate adoption and implementation of policy recommendations by all municipal agencies and organizations in Stockholm. The program, 'Naturally Smoke Free', defined goals and organized services that would be offered to the City's public sector worksites. It was to be carried out over a 2-year period, at the end of which it would be evaluated.

THE SUPPORT PROGRAM—'NATURALLY SMOKE FREE'

Overall strategy

A Community organization strategy was chosen since the program's primary goal was to support organizations in solving problems (Kinne, 1989; Minkler, 1990). In this context, community is defined from the social systems perspective, as formal organizations that operate within a given community (Fellin, 1987). Applying the locality development model of practice (Rothman and Tropman, 1987), existing structures including the city's own information department as well as information units in the city's other organizations and agencies, health and safety committees, sports/recreational clubs and unions were tapped.

Implicit in community organization is the concept of empowerment, i.e. the process by which individuals, communities and organizations are enabled to act effectively in transforming their lives and their environments. Organizations that become empowered are better able to engage in collective problem solving and to bring about changes in some of the very problems that contribute to ill health. A central role of 'Naturally Smoke Free' was to develop critical consciousness (Friere, 1973) among decision makers, managers and employees about the role of on-the-job smoking and smoking control in City workplaces. Workshops, focus groups (Pucci and Haglund, 1993) and meetings were used to this end. To paraphrase the words of the International Conference on Health Promotion (1986), the goal was to strengthen the commitment to smoke-free environments by helping municipal agencies and organizations in setting priorities as well as making decisions, planning and implementing strategies.

At an early stage, the staff of the city's occupational health services, S:t Erikshälsan, collaborated in the program. All personnel categories, i.e. industrial hygienists/engineers, counselors, occupational physicians, occupational nurses, physical therapists and ergonomists attended a seminar led by the National Board of Health and Human Services and the National Board of Occupational Safety and Health. The 35 occupational nurses attended industrial hygiene training for smoking cessation and the 18 industrial hygiene engineers participated in the production of the health education material 'Smoking a Work Environment Issue'. As the program progressed, occupational health nurses, physicians and, to a lesser extent, physical therapists and industrial hygiene engineers acted as consultants, held information meetings and participated in various program activities. In addition the occupational health teams actively promoted the county-wide Quit and Win contests by distributing materials and encouraging and supporting smoking cessation activities (Haglund *et al.*, 1988; Tillgren *et al.*, 1992a,b; Holm *et al.*, 1993).

Against the backdrop of model regulations recommended by PON, educational materials as tools and models for bringing about policy change were developed. Support and technical aid was provided in the form of training, seminars and workshops.

All agencies and organizations were invited to appoint one or several representatives to work with policy development and implementation in their respective organizations. These smoking control advocates were invited to participate in all program activities. Those who did not attend were kept abreast of what was happening in program news briefs and mailed information about seminars and workshops. They also received notices of up-coming activities.

For each agency/district, the entire organization was targeted and a broad cross-section of people, as represented in existing health and safety committees, were involved in determining and solving the issue. It was these committees that became involved in an interactional problem solving process. Smoking Control Advocates acted as liaisons between the health and safety committees and seminars and workshops. They

worked on tasks which led to policy formulation, adoption and implementation.

In addition, training for leaders of smoking cessation groups was arranged. Again, municipal agencies and organizations were asked to appoint people whose role would be to conduct and follow through on smoking cessation for employees at their respective places of employment. In many instances, contact persons and smoking cessation leaders were the same person.

The role of the Program Director, in this case the Personnel Policy Administration's Health Planner (the first author), was one of enabler and catalyst (see program overview in Table 1).

Program materials

A central aspect of the information component was the development and production of health education and other materials. This began with designing a logo. We wanted one whose high visibility and artistic merit did not preach about smoking. The final product was a rectangular kelly green background with a tomato red quadrant intersected by a multicolored bar. The text was simply 'Naturally smoke free'. The logo embellished all subsequent materials and was produced as postcards, posters, and folders for meetings. The text on the postcard and the folders read:

> In today's modern world, with its air pollution all of us must share responsibility for our environments. Smoke-free worksites are a natural part of our common responsibility. If you feel the need to discuss on-the-job smoking, talk to your supervisor.

During the fall of 1988 additional materials were developed and produced. The first, a model survey questionnaire, was developed and tested and then made available for organizations who wanted to assess their needs and potentials with regard to smoking at work.

Next, a series of signs evolved from the realization that existing and future regulations at worksites needed to be clearly communicated to all

Table 1: Overview of support program 'Naturally Smoke Free' (A,B,C) under smoking cessation, designate three different groups of participants in Smoking Cessation Leadership Training

Date	Steps in decision making and evaluation	Materials	Conferences, seminars, workshops	Smoking cessation
November 1986	Survey of smoking control policies			
December 1986	Recommendations to Personnel Policy Board			
Fall 1987		Logo, postcard, poster		
November 1987			Conference for City top management	
May 1988	Smoking control policy adopted by PON			
August 1988	Memo to all city managers			
September 1988			Conference for S:t Erikshälsan	Stage I (A)
November 1988			'Kick-Off'	Stage I (B)
Fall 1988		Questionnaire, signs, 'What's happening?' Layman's policy summary, exhibit, smoking, cessation manual & kit		Stage II (A and B)
February 1989			Seminar I	Stage III (A and B)
March 1989			Workshop A Seminar II	
Spring 1989		'Advice to the friend of a smoker'		
October 1989			Seminar III	Stage I (C)
January 1990			Workshop B	Stage II (C)
Spring 1990		'Passive smoking at workplaces'		
March 1990			Seminar IV	
April 1990			Seminar V	Stage III (C)
November 1990	Survey of Human Services Districts			

employees and visitors. The signs, which were the same color as the logo, about 5 in. in breadth and different shapes, were designed to inform all people in the locale. The first sign at the entrance (a triangle with the point down), requested smokers to put out their cigarettes. As one entered the building/locale, the second sign (a circle) advised that the person was entering a smoke-free area. Designated smoking areas (a third sign which was an arrow) indicated where the smoking area was. And finally, the smoking area was clearly marked (a triangle with the point up). There were two additional signs, 'smoking' (a rectangle on its side) and 'non-smoking' (a rectangle on its end). A folder 'What's happening?' presented at the signs and explained the rationale for restricting smoking at places of employment.

A companion brochure 'Naturally Smoke Free' summarized the policy recommendations made by the PON and introduced the support program that would be offered all public sector agencies and organizations in the City.

A portable exhibition was also developed and made available to the organizations free of charge. It presented ETS as a health hazard for all exposed employees. Finally, several materials were developed for smoking cessation activities and the leadership training courses described below. These included check lists for assessing smoking behavior and attitudes toward smoking at worksites, a kit with materials for both leaders and participants in smoking cessation and a training manual for leaders of smoking cessation groups. The manual was written by the first author in collaboration with a psychologist experienced in working with smoking cessation and an occupational health physician.

Conferences, seminars and workshops

Two conferences were conducted in which top executives and personnel managers and union representatives were invited. The first took place in November 1987 when negotiations in the CAMK bogged down. It was designed to give impetus to negotiations by heightening awareness of the issue and by laying the ground work for future involvement in the program. The content of the recommended policy was presented as well as the rationale behind the support program 'Naturally Smoke Free'. The second conference, the 'Kick-Off' for the program, came a year later. Its aim was to present the support program in more detail and to gain executives' commitment to work with the smoking issue. They were urged to appoint smoking control advocates and people to be trained to lead smoking cessation groups. Between February 1989 and March 1990, five seminars and two workshops based on discussions of practical situations associated with the phenomenon, smoking at work, were also conducted. The seminars dealt with the following topics:

(i) an overview of smoking behavior at work, discussions about policy change, its why and how;
(ii) in-depth presentations of four different policy types, their affect on employees, on health protection, on their administration, implementation and outcomes (Nairmark, 1987);
(iii) step-by-step introduction of policy implementation including most successful strategies/tactics/models (Pucci, 1991);
(iv) in collaboration with the National Board of Health and Human Services looked at political and economical factors that help or block policy adoption and implementation;
(v) two agencies, the central administration of the Human Services Department (not in this study) and the Stockholm City Planning Office presented their policies and implementation and talked about lessons learned.

In the first workshop participants were afforded hands-on experience with needs/potentials assessment. The second workshop provided an opportunity to solve specific tasks relating to policy implementation, and at the same time allowed them to become acquainted with other participating organizations.

Training for Smoking Cessation Leaders

Three stages of training for leaders of smoking cessation groups (Group A, B, and C) were conducted as part of the support program, as follows.

- Stage I was a full-day conference on medical/psychosocial aspects of smoking, behavior theory and group dynamics.
- Stage II provided participants with supervision as they planned and conducted their first smoking cessation group. They were provided with a complete educational kit including a training manual developed specifically for the program and materials for themselves and those trying to quit smoking.

- Stage III was designed around participants' experience with leading smoking cessation groups. It included practical exercises in working with groups and marketing the cessation programs.

METHODS

Design

There have been strong and repeated calls for more qualitative, context-rich studies in order to capture complex organizational phenomena (Van De Ven *et al.*, 1989; Dyer and Wilkins, 1991). Investigations have shown associations between in-place health promotion programs and adoption of restrictive smoking policies (US Department of Health and Human Services, 1985; Jenkins *et al.*, 1987; Glasgow, 1989; Emont and Cummings, 1990). Fielding (1991), who has long worked with worksite health promotion, recommends examination of program implementation processes and how worksite characteristics influence these processes. In order to take some of the above factors into consideration multiple data sources were used (Yin, 1984; Merriam, 1988).

Data collection

Operational measurements for policy implementation status were derived with the help of a follow-up survey mailed to directors of the 17 human services districts in November 1990, after the program was concluded. Respondents were asked to: (i) describe the current smoking control policy at their district; (ii) give the date of adoption; (iii) describe their current action plan (if there was one); and (iv) describe the composition of the employee advisory committee (if there was one). Districts were also asked to provide copies of any official protocols regarding the smoking policy and the action plan. In addition, minutes from district board meetings and other administrative documents were reviewed and responses to, and participation in, the support program were monitored. Formal interactions between 'Naturally Smoke Free' support program and the human service districts had been logged during the entire program. The districts were rated on their participation in the program and policy adoption status according to the parameters shown in Table 2. Based on their total scores, they were then ranked. The highest ranking was number 1.

The extent of in-place health promotion programs was determined with the help of semi-structured interviews with the Human Service Department's Senior Wellness Officer. Based on Fielding's (1990) model, the districts were assigned a score (see Table 3) and were ranked, as for implementation, with the highest ranking number 1.

Porras and Robertson (1987), in an attempt to systematize the study of organizational problems, identified a number of diagnostic elements which we have adapted to help us describe organizational climate at the districts. They are: appropriateness, pleasantness and tidiness of the physical setting; openness of communications; hospitality and telephone etiquette; organizational orientation of employees; and encouragement and maintenance of employee enthusiasm. The districts were also scored for problem solving. Professional staff at the Human Services Department's Research and Development unit were interviewed to obtain this information. In the semi-structured interviews, each item was assigned a score of 1–7 with a possible maximum

Table 2: Rating scale for districts' involvement 'Naturally Smoke Free'. Total possible points = 8.0. Lack of continuity is factored by dividing the value by 2. (ex-wellness officer attends the first seminar equals 0.5 points; a manager attends the next activity instead of the wellness officer would equal 1.0/2 or 0.5 points)

Activity	Points
Responses to written request for information (survey 11/90)	Yes = 1.0 No = 0.0
Participation	
Seminars, conferences and workshops by:	
Decision-makers	1.0
Wellness officers	0.5
Both	2.0
Other	0.25
Smoking cessation trainings	
Stage I	0.5
Stage II	1.0
Stage III	0.5
Policy adoption and level of endorsement	
Adopted by executive board	
prior to 11/1/88	2.0
11/1/88–4/31/89	1.5
5/1/89–10/31/89	1.0
after 11/1/89	0.5
Adopted by health and safety committee or informal (unwritten) agreement	0.25
No policy/agreement	0.0

Table 3: Rating scale for districts' health promotion program. Total possible points = 8.0

Attribute	points
Wellness Coordinator	
Salaried	1.0
Volunteer with other duties	0.5
No Coordinator	0.0
Employment status	
Full time, permanent	1.0
Part time, permanent	0.5
Project	0.25
Area/extent of responsibilty	
Entire district	1.0
One division	0.5
Overall rating	
Based on budget responsibility placement in district, strategy network and follow through	range 1.0–5.0

of 42. The districts were ranked according to their scores with number 1 being the highest.

Analysis

An approach of conjunctive collection, coding and analysis of data (Burgelman, 1983) was followed. Using pattern-matching, a technique for analysing case study data (Miles and Huberman, 1984; Yin, 1984) was examined and organized into patterns describing the nature and sequence of policy adoption, participation in the support program, in-place health promotion programs and organizational characteristics. Analysis also focused on the relationship of organizational climate to these patterns and searched for activity and contextual patterns that were consistent across districts.

Sample

Although the program targeted all municipal agencies and organizations in the city of Stockholm, our discussion addresses the implementation process in the context of the Department of Human Services' 17 autonomous districts.

FINDINGS

All 17 districts responded to the 1990 survey. Sixteen of them had adopted PON's guidelines for designated smoking areas. No district had banned smoking at work. Ten districts had adopted smoking control policies on the executive board level. Of them, two had adopted policies prior to the November 1988 'Kick-Off'. Four others had adopted policies by 30 April 1989; two by 31 October 1989 and two after 1 November 1989. Six districts had unwritten or informal agreements about on-the-job smoking. The 17th district had no policy. Five districts had developed action plans for policy implementation, but only two had appointed employee advisory committees.

The districts were ranked for policy implementation, in-place health promotion programs and organizational climate. Although the measurements are crude and in a number of cases several districts have the same score, a slight parallel trend was observed with respect to policy implementation and health promotion. No linkages were noted for organizational climate (see Table 4).

REFLECTIONS

Our purpose has been to chronicle events and experiences as the Stockholm City POF conducted its support program aimed at facilitating adoption and implementation of smoking control policies by municipal agencies and organizations. Our basic assumption has been that districts' success with smoking control policies is positively associated with participation in the support program and that the better the organizational climate, the more likely districts were to have health promotion programs in place. This would, in turn, enhance adoption/implementation of smoking control policies.

McLeroy (*et al.* (1988) proposed an ecological perspective when trying to understand changes taking place in organizations. Such an approach takes into account interpersonal processes, and organizational, community and policy factors. In a follow-up survey of two of the human service districts, organizational factors which may have impacted policy implementation were addressed (Pucci and Haglund, in review). The two districts, 'E' and 'K' were early adopters (Rogers, 1983). Both had adopted restrictive smoking policies on the executive level early during the program. These two districts were chosen because they were further along in the implementation process and we wanted to get a feel for the context of the implementation process. Both districts had assigned salaried employees the task of developing and implementing smoking control policies in concert with employee advisory committees.

Table 4: Summary of scores and ranking for implementation, health promotion and organizational climate, by district

	Implementation (total, 8; range, 0–7.5; median score, 3.0)		Health promotion (total, 8; range, 0–8.0; median score 5.0)		Organizational climate (total 42; range, 10–30; median score, 21.5)	
Rank	Score	District	Score	District	Score	District
1	7.5	E	8.0	C,D.E	30	Q
2	7.0	G	7.5	K,M	28	A
3	6.5	F	7.0	F,J	26	K,O
4	5.5	K	5.5	H	25	C
5	3.5	D,H,J,M	5.0	O	23	D
6	3.0	B	4.5	N	22	G
7	2.0	C,N	4.25	B	21	I,J
8	1.5	I	3.75	Q	19	P
9	1.0	A,O,P	3.5	I	18	E,L
10	0.5	Q	3.25	P	17	M,N
11	0.0	L	2.0	A	16	H
12			0.0	G,L	13	F
13					10	D
14						
15						
16						
16						
17						

Furthermore, both offered smoking cessation assistance to employees during working hours. Findings from that study revealed distinct patterns of similarities and differences at the two districts.

At district E where there was a shift in leadership and an extensive re-organization during the period of the program, employees had only a vague notion about a 'ban on smoking', as they termed it. Energy, which might have otherwise been devoted to implementation of worksite smoking control, was tied up with organizational issues. In contrast, district K, with its stable, long-standing leadership, did a better job of communicating the policy, at getting the message out and getting feedback. Employees at K knew about and understood the policy.

In a series of focus groups with smokers and former smokers also at districts E and K, specific patterns of on-the-job smoking associated with general organization characteristics, job characteristics and work role stress emerged (Pucci and Haglund, 1993). Employees at the districts are predominantly women working in what Schilling *et al.* (1985) called a stress associated model of quantitative overload, qualitative underload, lack of control and lack of support.

Home helpers and child care workers at both districts explained how they used smoking to cope with particularly stressful situations, i.e. 'when they had a problem, to quiet their nerves, when they were tired, when children were rowdy or parents demanding'. Furthermore, they saw smoking as an expected part of their job and indirectly the source of job satisfaction. ('You keep them company.') Child care workers at both districts did not want the children to know they smoked or to see them with a cigarette. This suggests that on-the-job smoking may, in part, be associated with the structure and function of the work organization.

That respondents in these two follow-up studies consistently identified aversive organizational conditions is in line with earlier investigations (Conway *et al.*, 1981; Crutchfield and Gove, 1984). Is smoking then related in part to patterns of stress rather than constituting risk behavior on the part of the smoker? Can smoking at work be viewed, at least in part, as the individual's response to the work situation?

Rarely have proposed wellness interventions in corporate cultures (read work settings) included alterations in work organization such as altering stressful management styles or the content of

boring work (Conrad, 1987). On the contrary, changing corporate culture has most often meant introducing more concrete interventions like company smoking policies (Walsh, 1984). For our purpose a more applicable conceptualization would be improving health by improving organizational culture and physical environment. Reduction of stress at work is a positive goal in itself, but could be addressed directly when targeting smokers in conjunction with cessation programs and/or adoption of restrictive worksite smoking policies (Gottlieb and Nelson, 1990).

McLeroy's (1988) ecological perspective also permits us to consider how the current standard worksite smoking control implementation model that was developed primarily in the USA, has worked in Sweden. Insights gained from our experience accentuate the need for cultural adaptations. Kelman (1981) in his book *Regulating America, Regulating Sweden* discusses the development of occupational safety and health organizations in the two countries. He points out that there are decidedly different national characteristics which have a bearing on how worksite health promotion programs have been envisioned and developed in the two countries. In America, it has been legitimate for people to define and pursue their own goals, while Sweden has a long tradition of deferring to the wishes of its leaders. Kelman points out that American models may not 'fit' well when applied to Swedish reality. We became acutely aware of problems of 'fit' as we adapted American health education material to Swedish (Pucci and Haglund, 1992) and we feel that this is an area which must be explored in future work of this kind.

FUTURE CONSIDERATIONS

Clearly evaluation of the program 'Naturally Smoke Free', cannot do justice to the work and commitment of so many people in so many organizations. Since the focus of the program was politically mandated service and not explicitly research, procedures for monitoring activities and projects were minimal, a fault which must be corrected in future similar work. In the study of districts E and K (Pucci and Haglund, in review) organizational patterns were noted which, although interesting, cannot be applied to all of the districts. Nevertheless, the suggestion that on-the-job smoking may, in part, be associated with the structure and function of the work organization needs to be explored. In order to do this, tools developed and tested for assessing organizational climate and its link to worksite health promotion are required. Green and Kreuter (1991) propose an administrative diagnosis as part of their precede–proceed model. Although the model was designed for application in communities, it is easily adapted to occupational settings as witnessed by their case study of smoking cessation and control in a state agency. Such a diagnosis might even facilitate adaptation of the current implementation model to Swedish reality.

Finally, perhaps we should be advocating 'healthy personnel policies', as Milio (1986) and the Ottawa Charter, endorsed at the International Conference for Health Promotion (1986), call for 'healthy public policies'. This would mean creating a work environment that enhances healthy behavior through an understanding of management practices, job characteristics, as well as how professional and/or occupational roles relate to smoking.

Address for correspondence:
Linda Gearhart Pucci
Boston Tobacco Control Program
Boston Department of Health and Hospitals
1010 Massachusetts Avenue
Boston
MA 02118
USA

REFERENCES

Arbetarskyddsstyrelsen och Socialstyrelsen (1983) Begränsning av tobaksrökning—allmänna råd (Tobacco control—general guidelines). AFS 1983:10 (in Swedish).

Burgelman, R. A. (1983) A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, **8**, 61–70.

Committee on Passive Smoking of the National Research Council (1986) *Environment Tobacco Smoke: Measuring Exposure and Assessing Effects*. National Academy Press, Washington, DC.

Conway, T. L., Vickers, R. R., Ward, H. W. and Rahe, R. H. (1981). Occupational stress and variations in cigarette, coffee and alcohol consumption. *Journal of Health and Social Behavior*, **22**, 155–165.

Conrad, P. (1987) Wellness in the workplace; potentials and pitfalls of worksite health promotion. *The Milbank Quarterly*, **65**, 255–275.

Crutchfield, R. D. and Grove, W. R. (1984) Determinants of drug use as a test of the coping hypothesis. *Social Science and Medicine*, **18**, 503–509.

Dyer, W. and Wilkins, A. (1991) Better stories, not better constructs, to generate better theory: a rejoinder to Eisenhardt. *Academy of Management Review*, **16**, 613–619.

Emont, S. L. and Cummings, K. M. (1990) Organizational factors affecting participation in a smoking cessation program and abstinence among 68 auto dealers. *American Journal of Health Promotion*, **5**, 107–114.

Eriksen, M. P., Lemaistre, C. A. and Newell, G. R. (1988) The health hazards of passive smoking. *Annual Review of Public Health*, **9**, 47–70.

Fellin, P. (1987) *The Competent Community*. Peacock, Itasca IL.

Fielding, J. E. (1990) Worksite health promotion programs in the United States: progress lessons and challenges. *Health Promotion International*, **5**, 75–84.

Fielding, J. (1991) Health Promotion and the worksite. In Green, G. and Baker, F. (eds) *Work, Health and Productivity*. Oxford University Press, New York.

Friere, P. (1973) *Education for Critical Consciousness*. Seabury Press, New York.

Glantz, S. A. and Parmely, W. W. (1991) Passive smoking and heart disease: epidemiology, physiology and biochemistry. *Circulation*, **83**, 1–12.

Gottleib, N. H. and Nelson, A. (1990) A systematic effort to reduce smoking at the worksite. *Health Education Quarterly*, **17**, 99–118.

Glasgow, R. E. (1989) Assessment of smoking behavior in relation to worksite smoking policies. *New York Journal of Medicine*, **1**, 31–34.

Green, L. W. and Kreuter, M. W. (1991) *Health Promotion Planning. An Educational and Environmental Approach*. 2nd edn. Mayfield, London.

Haglund, B. J. A., Svanström, L., Tillgren, P., Holm, L.-E. and Bracht, N. (1988) Policy change and implementation strategies in the development of a comprehensive cancer prevention program in urban areas (the Stockholm cancer prevention program SCPP). *Innovation*, **3**, 273–290.

Holm, L. E., Eriksson, C. G., Haglund, B. J. A., Lindeberg, G., Linnegren-Fleck, L., Tillgren, P. and Wirfält, E. (1992) Stockholm Cancer prevention program. In Eylenbosch, W. J., Van Larebeke, N. and Depoorter, A. M. (eds) *Primary Prevention of Cancer*. Raven Book Press, New York.

International Conference on Health Promotion (1986) *Ottawa Charter for Health Promotion*. 17–21 November 1986, Ottawa, Canada.

Jenkins, M., McEwen, J., Moreton, W. J., East, R., Seymore, L. and Goodwin, M. (1987) *Smoking Policies at Work*. Health Education Authority, London.

Kelman, S. (1981) *Regulating America, Regulating Sweden: A Comparative Study of Occupational Safety and Health Policy*. MIT Press, Cambridge, MA.

Kinne, S., Thompson, B., Chrisman, N. and Hanley, J. R. (1989) Community organization to enhance the delivery of preventive health services. *American Journal of Preventive Medicine*, **5**, 225–229.

McLeroy, K. R., Bibeau, D., Steckler, A. and Glantz, K. (1988) An ecological perspective on health promotion programs. *Health Educational Quarterly*, **15**, 351–377.

Merriam, S. (1988) *Case Study Research in Education, a Qualitative Approach*. Jossey-Bass, San Francisco, CA.

Miles, M. and Huberman, A. (1984) *Qualitative Data Analysis; a Source of New Methods*. Sage, Beverly Hills.

Milio, N. R. (1986) *Promoting Health Through Public Policy*. The Canadian Public Health Association, Ottawa.

Minkler, M. (1990) Improving health through community organization. In Glanz, K., Lewis, E. M. and Rimer, B. K. (eds) *Health Behavior and Health Education*. Jossey-Bass, San Francisco, CA.

Naimark, R. E. (1987) *Toward a Smoke-free Work Environment: Smoking Policy for Massachusetts State Facilities*. Harvard University, John Kennedy F. School of Government, Institute for the Study of Smoking Behavior and Policy, Cambridge, MA.

National Institute of Occupational Health & Safety (NIOSH) (1991) Environmental tobacco smoke in the work place, USHHS—CDC (Current Intelligence Bulletin 54).

Personal-och organizationsförvaltning (1988) *Rökfritt är Naturligt—en Införmation från Hälso- och Miljöpolitiska Enheten (Naturally Smoke Free)*.Information Stockholm, Stockholm (in Swedish).

Porras, J. I. and Robertson, P. J. (1987) Organization development theory: a typology and evaluation. In Woodman, R. W. and Pasmore, W. A. (eds) *Research in Organization Change and Development*. JAI Press, Greenwich, CN, vol. I.

Pucci, L. G. (1991) Implementing restrictive smoking policies: an overview of worksite intervention studies. *European Journal of Public Health*, **1**, 105–109.

Pucci, L. G. and Haglund, B. J. A. (1992) Focus groups: a tool for developing better health education materials and approaches for smoking intervention. *Health Promotion International*, **7**, 11–15.

Pucci, L. G. and Haglund, B. J. A. (1993) Organizational factors affecting smoking at work: results from focus groups interviews with smokers and ex-smokers. *The Journal of Primary Prevention*, **14**, 115–127.

Pucci, L. G. and Haglund, B. J. A. (1994) Going smoke free at two human service districts; a comparative case study (in review).

Repace, J. L. and Lowrey, A. H. (1985) A quantitative estimate of non-smokers' lung-cancer risk from passive smoking. *Environmental International*, **11**, 3–22.

Repace, J. L. and Lowrey, A. H. (1987) Environment tobacco smoke and indoor air quality in modern office work environments. *Journal of Occupational Medicine*, **29**, 628–629.

Rogers, E. M. (1983) *Diffusion of Innovations*. 3rd edn. The Free Press, New York.

Rothman, J. and Tropman, J. E. (1987) Models of community organization and macro practice: their mixing and phasing. In Cox, F. M., Erlich, J. L., Rothman, J. and Tropman, J. E. (eds) *Strategies of Community Organization*. 4th edn. Peacock, Itasca IL.

Schilling, R. F., III, Gilchrist, L. D. and Schinke, S. P. (1985) Smoking in the workplace—review of critical issues. *Public Health Reports*, **100**, 473–477.

Socialdepartementet (1990) *Tobakslagen—Betänkande av Tobaksutredningen*. Allmänna Fölag, Stockholm (SOPUY 1990:20) (in Swedish—summary in English 'A Comprehensive Tobacco Act').

Tillgren, P., Kanströ, L., Haglund, B. J. A. and Holm, L.-E. (1992a) Community analysis in the planning and implementation of the Stockholm cancer prevention program. *Health Promotion International*, **7**, 89–97.

Tillgren, P., Haglung, B. J. A., Gilljam, H. and Holm, L.-E. (1992b) A tobacco quit and win model in the Stockholm cancer prevention program. *European Journal of Cancer Prevention*, **1**, 361–366.

US Department of Health and Human Services (USDHHS) (1985) *A Decision Maker's Guide to Reducing Smoking at the Worksite*. USDHHS, Washington, DC.

US Department of Health and Human Services (USDHHS) (1986) *The Health Consequences of Involuntary Smoking: a Report of the Surgeon General*. Public Health Service Centers for Disease Control, Office of Smoking and Health, DHHS Publication CDC 97-8389, Washington, DC.

Van De Ven, A., Angle, H. and Poole, M. (1989) *Research on the Management of Innovation: The Minnesota Studies*. Ballinger, Grand Rapids, MI.

Walsh, D. C. (1984) Corporate smoking policies: a review and an analysis. *Journal of Occupational Medicine*, **26**, 17–22.

Walsh, D. C. and Engdahl, R. H. (1989) Corporate perspectives on worksite wellness programs: a report on the seventh PEW Fellows Conference. *Journal of Occupational Medicine*, **31**, 551–556.

Yin, R. K. (1984) *Case Study Research—Design and Methods*. Sage, London.