

CONTRIBUTIONS OF EVALUATION RESEARCH TO THE DEVELOPMENT OF COMMUNITY POLICING IN A CANADIAN CITY

Frank W. Schneider
Department of Psychology, University of Windsor

Paul Pilon
Information Resources Department, Windsor-Essex County
Health Unit

Barry Horrobin
Administrative Services, Windsor Police Service

Michael Sideris
Department of Psychology, University of Windsor
Windsor, Ontario

Abstract: This article reviews evaluation research on community policing (CP) in the City of Windsor, including the Windsor Police Service's utilization of evaluation evidence. It examines five studies of the initial year of two CP patrol units, one beginning in 1990 and the other in 1992. The studies included surveys of the CP-related attitudes and experiences of constables, community residents, and managers of small business, as well as time series analyses of crime trends. The results provided favourable process and outcome evidence. By 1995, more than half the city population was serviced by CP units, and follow-up time series analyses reconfirmed the earlier encouraging crime trends findings. However, in contrast to the positive beginnings, a 1997 survey of the service's membership revealed no strong support for CP, including an apparent division among management in attitudes about CP. Recent CP developments in the service are considered.

Résumé: L'article passe en revue les recherches évaluatives effectuées au sujet du modèle de «police communautaire» (CP) dans la ville de Windsor, y compris la preuve évaluative utilisée par le service policier de Windsor. Il examine cinq études auprès de deux unités de patrouille dans leur année initiale, soit le premier unité débutant en 1990 et le deuxième en 1992. Les études comprenaient des sondages ayant trait aux attitudes se rapportant au modèle CP et aux expériences de nombreux policiers, de rési-

dants communautaires, et de directeurs commerciaux, ainsi que d'analyses "time series" de tendances criminelles. Les résultats démontrent un processus et des conséquences favorables. Par l'année 1995, plus de la moitié de la population urbaine était servie par des unités de CP, et des analyses "time series" ont reproduit des résultats favorables à l'égard de tendances criminelles. Cependant, contrairement à ces débuts positifs, un sondage effectué auprès de membres du service policier en 1997 n'a révélé aucun appui pour le modèle CP. De plus, au niveau de leurs attitudes à l'égard du modèle CP, une division apparente parmi les directeurs du service policier a été révélée. Dans le contexte du service policier, des développements récents du modèle CP sont considérés.

During the last 10 to 15 years, the Canadian public policing system has undergone a major paradigm shift from the traditional, enforcement-oriented policing model, with an emphasis on reactive response (i.e., incident driven) in the containment of crime, to the community policing (CP) model, with a proactive emphasis on a close police-community partnership in the identification and solution of local problems (Leighton, 1994; Nancoo, 1993). Several factors have been suggested that contribute to the rise of CP, including the following three: the empirical evidence underscoring the limited effectiveness of the core operational methods employed in the professional policing model, the need for greater police attention to quality of life and order maintenance issues, and the need for closer and more positive police-community relations (Normandeau & Leighton, 1990).

The movement toward CP was punctuated in 1990 by its endorsement by the Solicitor General of Canada as the approach most suitable for dealing with Canadian policing responsibilities (Normandeau & Leighton, 1990). The Royal Canadian Mounted Police and the vast majority of provincial and municipal police organizations have acknowledged CP as the appropriate approach for dealing with contemporary law and order maintenance (Leighton, 1994; Seagrave, 1996), and many CP programs, representing a wide diversity of operational strategies, have been initiated (Leighton, 1994; Nancoo, 1993). Indeed the professional and public commitment to CP has become so strong that, by 1994, Leighton described CP as "firmly established as the dominant orientation or philosophy" (p. 209) of Canadian policing.

In less than two decades, CP gained widespread acceptance as the way to police Canadian society. There is limited empirical support,

however, for its effectiveness, that is, for the purported impact of CP on community crime, order, and stability (Leighton, 1994; Nancoo, 1993; Seagrave, 1996). In 1994, Leighton could point to only two formal, published impact evaluations: the Victoria community police stations project (e.g., Walker & Walker, 1992) and the Edmonton neighbourhood foot patrol project (e.g., Hornick, Leighton, & Burrows, 1993). In 1993, Nancoo called for detailed descriptions of CP initiatives to inform the policing community about how CP is being implemented in Canada and for an evaluation agenda to systematically examine the processes and outcomes of CP.

In response to Nancoo's (1993) call, the objective of this article is to review the development of CP in the City of Windsor, focusing on the role of evaluation research. Several writers (e.g., Chacko & Nancoo, 1993; Leighton, 1994) have observed that the minimal involvement of Canadian academic researchers has contributed to the small amount of evaluation research on CP. Such has not been the case in Windsor where academic researchers have been closely involved in the evaluation of CP since early in its development. This report begins with the initiation of the Windsor Police Service's first CP unit in 1990 and traces the development of CP up to early 1999. In all, seven evaluation studies are described.

SANDWICH TOWNE COMMUNITY PATROL

In May 1990, the Windsor Police Service initiated the Sandwich Towne Community Patrol (STCP) by opening a substation in the Sandwich area of the city, a 24-km² area with a population of 23,000 (Windsor's total area is 120 km² and population is 196,000).

The *Implementation Plan* (Greenham, 1990) for the STCP underscored the need for change within the Windsor Police Service in the context of a marked increase in calls for service and the growing recognition of the limitations of traditional policing approaches. The plan emphasized the need for a police-community partnership in defining and addressing community problems. It also emphasized the need for changing the traditional patrol constable role, which is geared to response and enforcement, to a less restrictive generalist constable role (Leighton, 1991) that entails the provision of a broader range of policing services, including criminal investigations, proactive activities (e.g., directed patrol and crime prevention), and referrals.

The STCP began with a volunteer staff of 1 staff sergeant, 5 sergeants, and 18 constables. Prior to the start of the STCP, the con-

stables took a two-week course on a variety of topics related to CP and the generalist constable role. To facilitate the transition to the generalist constable role, each constable also worked with a detective on 15 shifts. Some specific CP strategies included the following: individual constables were assigned personal neighbourhood zones to patrol; officers often patrolled on foot or bicycle; officers were directed to get to know merchants and residents (e.g., by convening public meetings); and officers routinely left notices to notify community members of their active concern and of the need for preventative measures (e.g., “business checked” forms for merchants and “lock-it-or-lose-it” pamphlets for car owners).

The importance of evaluation research was recognized by the service from the outset. The first author was asked to conduct a one-year pretest-posttest survey to assess the effects of the STCP on the job-related attitudes of the CP constables (Schneider, 1992).

Method

Participants and Procedure

The study focused on the attitudes of the STCP constables and a control group randomly selected from the remaining 221 constables of the service. Surveys were completed by both groups at the start of the STCP and approximately one year later. The surveys were made available in the constables' mail slots, except they were hand delivered to the pretest project constables during their CP training.¹ The surveys were returned in sealed envelopes to the researcher. The number of constables contacted and number who returned completed surveys, respectively, were: Pretest: STCP: 18 and 15; control: 31 and 22. Posttest: STCP: 15 and 11; control: 31 and 19.

Constable Survey

The pretest survey contained the following: (a) Minnesota (Job) Satisfaction Questionnaire — Short Form (Weiss, Dawis, England, & Loguist, 1967), (b) Job Involvement Scale — Short Form (Lodahl & Kejner, 1965), (c) Organizational Commitment Scale (Hoath, 1988), and (d) individual items pertaining to such topics as policing approaches and goals, community policing, and the STCP. Responses to all individual items ranged from 1 (strongly disagree) to 5 (strongly agree), with high scores indicating positive attitudes or views.

The posttest survey was expanded to address developments and changes that may have occurred over the year. Included were additional items about job enrichment and work activities and, for the STCP constables, items about progress toward the implementation of CP and the generalist constable role.

Results

Pretest Comparison of STCP and Control Constables

At the start of the STCP, the project and control groups were strikingly similar on the large majority of variables. Using *t* tests, the only significant ($p < .05$)² mean differences were that, as would be expected for volunteers, project constables saw more potential in the STCP than did control constables ($M_s = 4.27$ and 2.64 , respectively) and agreed more strongly with CP principles ($M_s = 4.27$ and 3.09 , respectively).

Implementation of CP

Before examining the attitudinal outcomes of CP, the process (had CP been implemented?) was considered. In the posttest survey, the STCP constables were asked 16 questions about whether they agreed that the STCP had made progress toward the execution of CP and the generalist constable role. With the exception of a question about police-citizen co-operation in crime prevention ($M = 3.72$), the mean scores were 4.00 (i.e., agree) or higher (overall $M = 4.21$). For instance, the project constables agreed that the STCP had made significant progress toward: implementing the generalist constable role, developing a co-operative partnership between police and community, introducing neighbourhood policing, and gaining community input in the identification of problems.

The enactment of CP requires changes in the activities officers routinely carry out. Constables indicated the number of times over the previous 10 work days they had engaged in each of 11 activities. The results showed no differences between STCP and control constables regarding traditional response and enforcement modes of policing (e.g., made arrest and issued parking violation). However, STCP constables reported higher frequencies of involvement than control constables in activities that entailed interaction with the community: assisted with juveniles ($M_s = 5.82$ and 1.00 , respectively),

spoke at community meeting ($M_s = 3.82$ and 0.42 , respectively), attended community meeting ($M_s = 9.18$ and 0.11 , respectively), visited a business ($M_s = 3.91$ and 0.75 , respectively), and visited a home ($M_s = 3.36$ and 0.75 , respectively). These figures are only for those constables who indicated they worked in patrol (STCP, $n = 11$; control, $n = 12$).

This feedback suggested that the STCP had taken significant steps toward the implementation of CP. Thus, it was possible to determine if the enactment of CP was accompanied by attitude changes among the participating officers.

Attitude Change After a Year

Comparisons of the pretest and posttest responses revealed evidence of positive change among STCP constables and no change among control constables. Although project constables demonstrated no changes in job involvement and organizational commitment, their mean job satisfaction increased significantly from pretest to posttest (66.13 to 77.91; possible range = 20 – 100). Moreover, the STCP constables' posttest scores on several individual job-attitude items were substantially higher than their pretest scores, for example, enthusiasm about work ($M_s = 4.00$ and 3.05 , respectively), satisfaction with personal development from the job ($M_s = 4.18$ and 2.93 , respectively), and amount of challenge in the job ($M_s = 4.27$ and 3.33 , respectively). No pretest-posttest differences occurred for the control constables.

Posttest comparisons of the STCP and control groups revealed many differences. For instance, the STCP constables were more likely than control constables to see themselves as making a difference in the community ($M_s = 4.00$ and 2.79 , respectively) and as problem solvers ($M_s = 4.09$ and 2.95 , respectively). Also, they were more likely to report that over the year they had been given broader responsibilities ($M_s = 4.00$ and 3.05 , respectively), learned new policing techniques ($M_s = 4.55$ and 3.42 , respectively), and became more innovative in decision-making ($M_s = 4.09$ and 3.32 , respectively). Moreover, after one year, STCP constables continued to see more potential in the STCP ($M_s = 4.55$ and 3.37 , respectively) and to agree more with CP principles ($M_s = 4.45$ and 3.58 , respectively). It is noteworthy that the STCP and control means for these two items increased, although non-significantly, from 1990 to 1991.

A widely acknowledged roadblock to the successful implementation of CP is resistance from within the membership (Clairmont, 1991). At posttest, the STCP constables perceived such resistance. They tended to agree that the rest of the service had generally negative feelings toward the STCP ($M = 3.60$) and were biased against its officers ($M = 3.60$). However, the control officers disagreed; they tended not to perceive negative feelings toward the STCP ($M = 2.95$) and its officers ($M = 2.42$).

Discussion

The constable survey results indicated that, during the first year of the STCP, appreciable progress had been made toward implementing CP. This process evidence increased our confidence that the pre-test-posttest attitudinal changes observed in the STCP constables (e.g., increased job satisfaction and feelings of personal development) resulted from their involvement in the CP initiative. Moreover, the CP constables indicated continued commitment to their CP unit and CP goals. At the same time, there was no indication among other constables in the service of widespread opposition to the STCP and CP in general.

The posttest STCP sample was considerably smaller than the pre-test sample, raising concern about possible sampling bias. During the first year, two constables and four sergeants were transferred out of the unit, and one constable resigned from the Service. The researcher interviewed five of the transferees (two constables and three sergeants) who reported attitudes entirely consistent with the positive survey findings. None regretted having been part of the STCP, all saw considerable value in the STCP, and all thought that the STCP had made good to excellent progress.

The positive attitudinal findings were bolstered by anecdotal evidence attesting to how favourably the CP unit had been received by community residents. For instance, on Halloween, over 400 area residents visited the substation which was decorated as a haunted house. Furthermore, several positive articles were published in *The Windsor Star* newspaper, for example, "West-enders warm to neighbors in blue" (Robertson, 1991) and "community policing has been an unqualified success in Windsor's west end" ("Positive Police Move," 1992).

EAST END COMMUNITY PATROL

The executive of the Windsor Police Service decided to expand its CP initiative by opening another unit. The decision was predicated primarily on the executive's strong conviction about the promise of CP and the favourable evaluation evidence about the STCP. Thus, in June 1992, the East End Community Patrol (EECP) began in a 28-km² area with a population of 38,000. The substation was staffed by 1 staff sergeant, 4 sergeants, and 30 constables. During the year, for budgetary reasons, the number of constables was reduced to 21.

An important distinction between the STCP and EECP was that the STCP officers had volunteered for CP, whereas the EECP officers were assigned to the EECP (i.e., an entire platoon was simply transferred). The use of non-volunteers was thought to be an important test of the feasibility of achieving acceptance of CP in the wider service. As with the STCP, EECP constables were given two weeks of in-class training on CP and generalist constable concepts; however, unlike their STCP counterparts, the EECP constables did not train individually with detectives.

The goals and implementation model of the EECP were the same as for the STCP. However, a more comprehensive evaluation approach was used. Four studies were carried out. Each study focused on different outcome criteria and involved a comparison of data collected before the implementation of the EECP and a year or more later. Three studies entailed surveys that focused on the attitudes, views, and experiences of different stakeholder groups: constables (Study 1), residents (Study 2), and managers of small businesses (Study 3). Study 4 used statistical analyses to examine the effect of CP on reported rates of criminal activity. Studies 1, 3, and 4 were conducted by the second author under the direction of the first author as part of an applied social psychology doctoral internship (Pilon, 1994). Study 2 was an internal service project conducted by the third author (Horrobin, 1993), assisted by the first author.

EECP Study 1: Survey of Constables

Method

Participants and procedure. Both at the pretest (June 1992) and posttest (June 1993), surveys were made available to the EECP constables and to a random sample of constables from the service's two

patrol divisions. The pretest surveys were distributed by the researcher to the constables in person; the posttest surveys were mailed to the constables. The number of constables contacted and the number returning completed surveys (to the researcher in sealed envelopes), respectively, were: Pretest: EECP: 24 and 19; control: 25 and 19. Posttest: EECP: 17 and 12; control: 19 and 7. These figures indicate much smaller sample sizes at the posttest. The differences likely resulted in part from the change in the administration procedure from pretest (hand delivered) to posttest (mailed) and, for the project group, from the budget-induced reduction of constables from 30 to 21 over the year.

Constable survey. The questions were taken from the STCP constable survey. Factor analysis of the STCP data was used to reduce the survey length and create composite variable scales. Variables measured in *both pretest and posttest surveys* included: job satisfaction, organizational commitment, job involvement, and attitude toward CP. Variables measured in the *posttest survey only* were job enrichment over the year, attitude toward the EECP, perceived attitudes of non-CP constables toward the EECP, perceived implementation of CP (EECP group only), and perceived implementation of generalist constable role (EECP group only). Scale scores could range from 1 (strongly disagree) to 5 (strongly agree).

Results

The high level of subject attrition suggests the need for cautious acceptance and interpretation of the results.

Pretest comparison of EECP and control constables. Using *t* tests, it was determined that at the start of the EECP, the project group's job satisfaction was lower than the control group's ($M_s = 3.36$ and 3.90 , respectively). The lower satisfaction of the EECP constables may have been due to the impending changes in their roles as police officers, changes over which they had no control. The project and control groups did not differ in organizational commitment, job involvement, and attitudes toward CP.

Implementation of CP. After one year, the EECP constables agreed that the EECP had made significant progress toward the implementation of both CP ($M = 4.25$) and the generalist constable role ($M = 4.22$). These scores are similar in magnitude to those for the STCP, and thus support the process component of the EECP.

Attitude change after a year. The job satisfaction of the EECPC constables tended to be higher at posttest than at pretest ($M_s = 3.73$ and 3.36 , respectively). Although the difference was not statistically significant, it is important to recognize that the job satisfaction of this non-volunteer group did not decline in conjunction with their CP experiences. In fact, the significant pretest difference between the EECPC and control groups had disappeared. No significant project versus control posttest differences were found for organizational commitment ($M_s = 4.14$ and 4.05 , respectively) and job involvement ($M_s = 2.03$ and 2.28 , respectively).

As with the STCP constables, EECPC constables reported experiencing more job enrichment over the year than did control constables ($M_s = 3.92$ and 3.21 , respectively). Furthermore, EECPC constables had more favourable attitudes toward CP ($M_s = 3.65$ and 3.00 , respectively) and the EECPC ($M_s = 3.89$ and 2.50 , respectively).

The results thus depict a positive picture of how the EECPC constables reacted to their first involvement with CP; they experienced relatively high job enrichment and favourable attitudes concerning the concept of CP and their CP unit. On the other hand, like their STCP counterparts, the project constables perceived more bias against their unit among other personnel than did the control constables who perceived the existence of little bias ($M_s = 3.08$ and 1.50 , respectively).

EECP Study 2: Survey of Residents

Method

Participants and procedure. From the EECPC area, a random sample of 390 households was selected. In both May 1992 and June 1993, surveys (including a postage-paid envelope addressed to the researcher) were left in the mailboxes. The number of usable surveys returned was 229 (59%) for the pretest and 170 (44%) for the posttest.

Resident survey. Both pretest and posttest surveys included 11 questions (with variable response formats) that pertained to the following topics: crime levels, pedestrian safety, police-resident relations, quality of police service, and the EECPC.

Results

There were no significant demographic differences between the pretest and posttest samples. Chi square analyses indicated that many

more residents knew the location of the EECP substation at the end of the first year than at the beginning (75% vs. 30%), indicating that the unit had succeeded in increasing its visible presence in the community. Other significant pretest-posttest differences suggested a positive EECP influence. A greater percentage of posttest residents compared with pretest residents believed their community had a low level of crime (46% vs. 25%), and a smaller percentage believed the level of crime in their neighbourhoods had increased in the past year (25% vs. 46%). Also, posttest respondents were more likely to rate the quality of policing services in the east end of Windsor as either good or excellent (75% vs. 52%). To directly tap residents' evaluations of the EECP, the following question was added to the posttest survey: "Do you feel the East End Community Patrol is better than the police service you had before or is it a waste of tax dollars?" A large majority (80%) responded that the EECP was better, and only 6% responded that it is a waste of tax dollars (the rest indicated they didn't know).

The above findings suggest that the residents supported the EECP and approved its style of service delivery. On the other hand, no pretest-posttest differences were found in the ratings of several factors that might be expected to reflect the influence of a CP effort: feelings of pedestrian safety, resident-police relations, police response times, approachability of police, and provision of crime prevention information.

EECP Study 3: Survey of Business Managers

Method

Participants and procedure. Twenty-five small businesses were randomly selected from the 201 in the EECP area (mean number of employees = 18). In both July 1992 and July 1993, the researcher conducted an on-site, oral survey with a manager from each business. Two businesses closed prior to the posttest. Therefore, the pretest sample included 25 managers and posttest sample included 23 managers (who usually differed from the pretest managers).

Business manager survey. The survey consisted of a combination of individual questions that were accompanied by specific response scales and more open-ended, follow-up questions. The questions pertained to the managers' attitudes toward and experiences with the police, including the EECP.

Results

The business manager survey provided some favourable process and impact evidence. Chi square analyses (for comparing percentages) and *t* tests (for comparing means) were used. Similar percentages of pretest and posttest managers were aware of the existence of the EECP (80% and 78%, respectively). However, as with the resident survey, more posttest managers knew the location of the EECP substation (32% vs. 70%).

Support for the idea that EECP constables were doing CP was that more than half the posttest managers ($n = 14$) but only one pretest manager reported an unsolicited police visit to their business during the past year. Also indicative of CP was an increased emphasis on crime prevention. That is, whereas the estimated amount of time the police spent during a call for service did not change from pretest to posttest ($M = 21$ min), posttest constables spent many more minutes than pretest constables giving information about how to prevent similar problems from recurring ($M_s = 8.20$ and 2.11 min, respectively).

Concerning the possible impact of the EECP, calls for service, as reported by the managers, declined from pretest to posttest ($M_s = 2.80$ and 1.22 , respectively). The most common reason for a call was break and entry; the percentage of businesses that called for this reason dropped from 24% to 0%. Other impact evidence stemmed from specific questions about the EECP. The vast majority of pretest (88%) and posttest (87%) managers reported they felt more secure running their businesses under CP than conventional policing. Questions asked only at the posttest indicated that 48% of managers believed the EECP had impacted positively on their businesses, and 78% thought it had impacted positively on the community (in both cases, the most common perceived effects were fewer problems with adolescents and increased security).

On the other hand, there were no pretest-posttest differences on questions dealing with confidence in the police, familiarity with patrol constables, and the approachability and effectiveness of the police.

EECP Study 4: Effect on Crime

Method

To assess the impact of the EECP on crime rates, a time series analysis (Cook & Campbell, 1979) was performed on the monthly reported

incidence of each of five types of crime: assault, actual and attempted break and enter, actual and attempted theft, actual and attempted motor vehicle theft, and mischief. Incident frequencies for the 50 months prior to the June 1992 commencement of the EECP were used to generate autoregressive moving average (ARIMA) models for the five crime variables. Frequencies for the following 18 months were used to test for the impact of the initiation of the EECP. The internal validity of this method is very high. It tests for an abrupt and lasting change in the behaviour of a series that coincides with the date of an intervention. Any other trends, seasonal fluctuations, or other changes in the series that are not associated with the onset of the intervention are accounted for.

Results

For three types of crime — assault, break and enter, and motor vehicle theft — the time series analyses suggested no change associated with the onset of the EECP. Significant effects were indicated for the other two types. Theft exhibited a negative step effect, that is, a relatively permanent decrease in the mean level of the series. As a result of the EECP, the mean monthly levels of actual and attempted theft dropped 25%. Mischief exhibited a significant change in slope. For 50 months prior to the onset of the EECP, the mean level of mischief increased by 0.48 occurrences per month. Following the onset, the mean level of mischief declined at a rate of 0.44 occurrences per month, resulting in an overall mean decrease of 14% by the end of 18 months.

Discussion

Each of the four evaluation studies provided evidence of the efficacy of the EECP during its first year of operation. Whereas not all relevant pretest-posttest and EECP-control comparisons were statistically significant, many were, and those that were significant favoured the CP initiative.

As noted earlier, the EECP was viewed as a measure of how well non-volunteer constables would respond to involvement in a CP initiative (cf., Wycoff, 1988). The Study 1 survey results were encouraging. The evidence at the end of the year indicated that the EECP constables did not reject their CP assignments. Their job satisfaction did not decline; instead it increased (though non-significantly) over the year. Moreover, compared with the control constables, at

year's end, they reported more job enrichment and more favourable attitudes regarding both CP and the EECP. Only one constable requested a transfer out of the EECP during the first year.

One of the more reliable findings of research on CP is that the public likes it (Moore, 1994; Normandeau, 1998). Residents of the EECP area were no different. Study 2 showed they evaluated the quality of policing services more positively at the end of the year than at the start, and at the end the vast majority preferred the EECP to traditional policing. Also attesting to the magnitude of community support is that, during the first year, several service clubs started an umbrella group, "Friends of the East End Community Patrol," that raised \$60,000 for startup equipment and supplies. Citizen fear of crime often is used as a criterion of program effectiveness (Greene, 1998; Normandeau, 1998). The present data are equivocal in that, after a year, residents perceived a lower rate of crime in their neighbourhoods, although they did not report feeling safer when out walking.

Although the business community commonly is viewed as an important policing stakeholder group, its perspective seldom has been examined in CP research. Study 3 represents an exception, as its focus was on small business managers' experiences with the EECP. Like the residents of the patrol area, the business managers were favourably predisposed to the EECP. A substantial majority indicated they felt more secure conducting business under the EECP and believed the EECP had impacted favourably on the community. Approximately half indicated a positive impact on their businesses. The business managers also reported declines in calls for service during the year, particularly regarding the incidence of break and enters. One especially important methodological contribution of Study 3 is that it provided confirmation of the implementation process that was independent of EECP constable reports. Specifically, the business managers reported increases in the occurrence of unsolicited constable visits and constable emphasis on crime prevention.

It is frequently observed that there is very little rigorous evidence linking CP initiatives to reductions in criminal behaviour (Moore, 1994; Normandeau, 1998). Study 4 represents an exception. Using statistical procedures recommended for evaluating the effect of CP programs on crime levels (Walker, Walker, & McDavid, 1993), declines in both actual and attempted theft and reported mischief were tied directly to the first year of the EECP.

The EECF studies were not free from methodological limitations. Most noteworthy were the constable attrition in Study 1 and the absence of control groups for the resident survey (Study 2) and business manager survey (Study 3). However, the individual methodological shortcomings are of less concern when considered in the context of the overall, consistent pattern of positive results. Indeed, a major strength of the research, one that is seldom found in published evaluation research on CP, is the multiple-study approach taken here. The positive evidence from three different stakeholder groups — constables, residents, and business managers — and the sophisticated time series analyses combine to increase our confidence that the EECF had implemented CP and that there were several positive outcomes.

1997 SURVEY OF THE MEMBERSHIP'S ATTITUDES

The research that was carried out to evaluate the first year of each of the Windsor Police Service's two CP projects indicated that the projects succeeded in meeting some of the original objectives of the *Implementation Plan* (Greenham, 1990). Potential benefits of CP outlined in the plan and supported by the research included, for example, increases in: police involvement with the community, public satisfaction with policing services, public safety (reductions in crime), job enrichment for officers (including adoption of the generalist constable role), and officer job satisfaction. During subsequent years these documented successes were invoked by the leadership of the service to defend CP in Windsor against repeated budgetary threats to its continuation. As an example, the second author presented the results of EECF Studies 1, 3, and 4 at a 1993 Windsor Police Services Board meeting about whether or not to close down the EECF substation.

The STCP and EECF survived the closure threats and have continued to the present. In 1996, however, largely for budgetary considerations, the EECF substation was closed, and the personnel were transferred to Station 2, a full-service patrol station (approximately 80 officers) responsible for policing three districts, including the EECF district (area = 50 km²; population = 87,000). Station 2 was renamed the EECF and given a mandate to carry out CP.

In response to the service's concern about the influence of the closure of the substation on the effectiveness of its CP operations in the original EECF patrol area, the second author conducted time

series analyses to assess the closure's impact on the incidence of crime (Pilon, 1998). The analyses revealed no significant impact. Moreover, the study provided an opportunity to add 24 months to the original impact assessment of the start of the EECP (Pilon, 1994). These additional analyses confirmed the original results by showing that, through the end of 1995, the initial drop in actual and attempted thefts had been sustained and that the gradual decline in mischief had continued. Furthermore, whereas the original analyses had indicated no change in the frequency of actual and attempted break and enters, the longer-term, more powerful analyses revealed a significant 29% decline.

Also, in 1996, the service eliminated the generalist constable role, returning most responsibility for conducting criminal investigations to the Criminal Investigation Division. Minor investigations remained with CP patrol officers if they had time to do them. The main reason for abandoning the generalist concept was the dissension it caused among patrol officers who were left to handle routine patrol calls — they felt they were doing most of the work — while the generalists did follow-up work (Staff Inspector W. Stephens, personal communication, March 1, 1999). The loss of the generalist constable was a major setback for CP in the Windsor Police Service, because the generalist component of the patrol officer role is widely regarded as essential to CP (Normandeau, 1993). However, in the mission statement of the 1996 *Windsor Police Strategic Plan*, the service reaffirmed its commitment to CP.³

Other than the time series analyses of the impact of the EECP substation closure, no evaluations of the service's patrol initiatives were conducted in the four to five years following the initial evaluations of the STCP and EECP. By 1997, more than half the population and area of Windsor were serviced by the two CP units, and the service was in the process of establishing neighbourhood zone policing throughout the rest of the city. Officially CP had become a substantial component of Windsor police operations. An important question pertained to how the overall membership evaluated CP. Police organizations undergoing major philosophical and operational changes must anticipate the possibility of resistance from some of their members (Clairmont, 1993; Sadd & Grinc, 1994). Recall, however, that the initial evidence in Windsor encouraged optimism. After the first year the STCP (volunteer) constables were very positive about CP, and the EECP (non-volunteer) constables were generally positive.

Early in 1997, the first and fourth authors submitted to the service a proposal to survey the membership's attitudes about CP and the service's CP efforts. The proposal was approved, and the research was carried out by the fourth author for his BA honours research (Sideris, 1997) under the direction of the first and third authors.

Method

Participants and Procedure

All 398 uniformed personnel were invited to complete a survey about CP. The surveys accompanied the officers' pay stubs with instructions to mail the completed surveys (in attached envelopes) to the researchers. A total of 118 (30%) usable surveys were received. For each rank, the numbers of officers with and without CP experience, respectively, were: constables: 34 and 29; detectives: 7 and 8; sergeants: 5 and 6; staff sergeants: 12 and 6; and upper ranks: 2 and 3. Five officers did not indicate if they had CP experience, and one did not indicate rank; their data were retained for analyses.

CP Survey

The CP survey consisted of 23 attitude statements (plus four demographic questions) with possible responses ranging from 1 (strongly disagree) to 5 (strongly agree). The statements dealt with the following topics: CP in general, CP versus traditional policing, the service's CP initiatives, perceived attitudes of the membership, and senior management.

Results

Attitudes Toward CP Across the Years

Two items common to the CP survey and the STCP and EECF surveys enabled an examination of whether constable attitudes had changed from the first years of CP in Windsor to 1997. One item was a general statement about agreement with CP principles, and the other was a specific statement about the potential value of the service's CP efforts (see items 1 and 9 in Table 1). Assignment (CP and no CP) x Year (1990, 1992, and 1997) ANOVAs were used to analyze each item. No CP assignment meant the officer had never worked in a CP unit. CP assignment was defined differently for each

year. For 1990 and 1992, CP assignment included constables who were in CP training in the STCP and EECF, respectively; for 1997, CP assignment referred to constables who at one time or other had worked in one of the two CP units.

The ANOVA results for both the general and specific items revealed significant effects of assignment and similar Assignment x Year in-

Table 1
1997 Survey of the Attitudes of the Membership

Item	Mean ^a		Percent ^b (whole sample, <i>N</i> = 118)	
	With CP experience (<i>n</i> = 60) ^c	With no CP experience (<i>n</i> = 53) ^c	Disagree or strongly disagree	Agree or strongly agree
<i>CP in general</i>				
1. General agreement with CP principles	3.61	2.92 ^d	31	54
2. Try to use CP principles in job	3.67	3.04 ^d	27	53
3. CP is not real policing	2.20	2.75 ^d	61	22
4. CP is effective in controlling crime	3.02	2.58 ^d	45	34
<i>CP versus traditional policing</i>				
5. Traditional more effective in crime control	2.37	2.87 ^d	54	23
6. Prefer traditional model over CP	2.85	3.30 ^d	36	46
7. Should spend more on traditional, less on CP	3.05	3.43	32	50
<i>CP in the Service</i>				
8. CP efforts have been successful	3.18	2.57 ^d	33	29
9. See lot of potential value in CP efforts	3.38	2.81 ^d	34	42
10. CP is the central philosophy	2.78	2.75	47	27
11. CP should be the central philosophy	2.68	2.21 ^d	61	23
12. Interest in being assigned to CP unit	3.12	2.38 ^d	45	34
13. CP efforts reduce Service's effectiveness	2.64	3.21 ^d	46	37
<i>Membership's attitudes</i>				
14. Most members are generally positive about CP	2.07	2.28	75	10
15. Existence of negative feelings toward CP units	4.29	3.92 ^d	5	83
16. Existence of bias toward CP officers	3.75	2.87 ^d	32	52
<i>Senior management</i>				
17. Leadership is committed to CP	3.68	3.58	15	63
18. Members have been adequately informed	3.65	3.43	22	58

^a Mean scores could range from 1 (strongly disagree) to 5 (strongly agree). ^b Percent for neutral is not shown. ^c Five respondents did not indicate their CP experience; thus the sample sizes for CP and no CP experience do not sum to *N* = 118. ^d The difference between means is significant at the .05 level or better.

teractions. For constables with no CP experience, there were no differences across years for either the general statement (*M*s for 1990, 1992, and 1997 were 3.09, 3.26, 3.10, respectively) or specific statement (*M*s = 2.64, 2.95, and 2.90, respectively). On the other hand, for constables with CP experience, favourableness of attitudes declined across years for the general statement (*M*s = 4.27, 3.58, and 3.32, respectively) and specific statement (*M*s = 4.27, 3.58, and 3.15, respectively). Regarding comparisons between constables with and without CP experience, the former agreed more with CP principles in 1990, but not in 1992 and 1997; moreover, they saw more potential value in the CP efforts in 1990 and 1992, but not in 1997.

Attitudes of Membership

To examine the membership's attitudes in 1997, each item was subjected to an Assignment (CP and no CP) x Rank (constable, sergeant, detective, and staff sergeant) ANOVA. The data for the upper ranks were omitted because of the small sample size ($n = 5$). The results indicated a significant effect of assignment for 16 of 23 items, whereas there were no significant rank or interaction effects. The CP group and no CP group means for selected items (Table 1) indicate that officers with experience in CP were more favourably predisposed to CP (e.g., see items 1, 2, 9, and 12). Also, officers with CP experience were more likely to perceive the existence of bias against CP units (item 15) and against CP officers (item 16).

In the above ANOVAs, the rank variable failed to achieve significance, a finding that may have resulted from the relatively small samples of detectives, sergeants, and staff sergeants. To further explore the role of rank, all the ranks above constable were combined, and an Assignment (CP and no CP) x Rank (Constable and Above Constable) ANOVA was conducted on each item. These analyses reproduced the significant main effects of assignment. However, they also revealed that rank significantly interacted with assignment for items 1, 6, 11, and 18. Analyses of the interactions showed that constables with and without CP experience did not differ on any item, whereas their superiors with and without CP experience differed considerably on all four items. Compared with their counterparts with no CP experience, those with CP experience indicated: greater agreement with CP principles (item 1, *M*s = 2.74 and 4.00, respectively), less preference for traditional policing versus CP (item 6, *M*s = 3.48 and 2.46, respectively), greater agreement that CP should be the organization's central policing philosophy (item 11, *M*s = 1.96

and 3.04, respectively), and greater agreement that the membership had been provided inadequate information about the development of CP (item 18, $M_s = 3.13$ and 3.92 , respectively).

To gain a clearer picture of the overall membership's attitudes, the percentages for the entire sample who disagreed (disagree and strongly disagree combined) and agreed (agree and strongly agree combined) for each item are presented in Table 1. We comment about the percentages in the next section.

Discussion

The low participation rate (30%) was unexpected, because the rates for the 1990 and 1992 constable surveys had generally exceeded 60% and because the survey length was kept short to enhance the officers' willingness to complete it. Two plausible, not necessarily mutually exclusive, explanations come to mind. One is that the low response rate reflected widespread dissatisfaction with CP. As Table 1 shows, many officers reacted negatively to CP. A respondent who added written comments to the survey observed, "some of my colleagues just threw out the survey in disgust of the survey's topic." A second explanation for the low response rate focuses on morale problems stemming from ongoing labour-management difficulties (Thompson, 1996). Whatever the reason for the low response rate, it suggests the need for caution in generalizing to the total membership. Nonetheless, because over 100 members did complete the survey, and their responses represented the most recent attitudinal data available, consideration of their data is warranted.

The comparisons across the years showed no improvement in constable attitudes. The attitudes of the constables with CP involvement became less favourable, and the attitudes of constables with no CP involvement remained constant. In fact, in 1997, there were no significant differences between the two groups of constables. Thus, the initial successes of the STCP and EECF, as indicated by the early surveys of constable attitudes, seem not to have been sustained through the subsequent years. These findings took us by surprise given the positive evidence concerning the early CP initiatives and the evidence that involvement in properly implemented CP programs, including the job-enlargement and job-enrichment benefits, frequently leads to improved attitudes regarding CP (Greene, 1989).

The percentage results for the entire sample (Table 1) revealed that less than 30% believed that the service's CP efforts had been successful (item 8) and that CP should be the organization's central policing philosophy (item 11). Tellingly, only 34% expressed interest in working in a CP unit (item 12). These findings suggest that a large portion of the membership did not embrace CP as it was manifested in the service in 1997. However, it is noteworthy that members were sceptical not only about the effectiveness of CP in controlling crime but also about the effectiveness of traditional policing. Only 34% indicated that CP is effective (item 4), and even fewer (23%) indicated that traditional policing is more effective than CP (item 5).

Many members believed that dissatisfaction with CP was widespread. Only 10% agreed that most members have generally positive attitudes toward CP (item 14), and 83% agreed that in non-CP units negative feelings toward CP units existed (item 15). However, other findings challenge the veracity of these perceptions. When attitudes toward CP in general are considered, the picture is more favourable. In fact, a (slight) majority expressed general agreement with CP principles (item 1), indicated they attempt to use CP principles in their work (item 2), and disagreed that CP is not real policing (item 3).

These findings suggest that attitudes are more negative regarding CP within the organization than CP in principle. They also indicate that many members underestimate the degree of membership support for the principles of CP. We suggest that the concept of pluralistic ignorance may apply to the belief system of the membership. Pluralistic ignorance refers to a widely held false impression of how most members of a group feel or think (Miller & McFarland, 1987).

The interaction between assignment and rank on several items depicted a police organization with a management that was sharply divided in their valuation of CP. Managers with CP experience were much more likely than those without CP experience to agree with CP principles (80% vs. 39%) and to agree that CP should be the service's central policing philosophy (50% vs. 13%). They were also less likely to prefer traditional policing over CP (23% vs. 65%). It is noteworthy that no difference between constables with and without CP experience were found on these questions. Certainly we can wonder how the opposing perspectives on CP held by managers with and without CP experience impacted on the rank and file of this

organization. Clearly there was a sizable contingent of supervisory personnel whose policing ideologies, and likely actions, were antithetical to the CP goals of the organization and very likely served to subvert them.

RECENT DEVELOPMENTS

In a September 17, 1997, memorandum to his senior officers about the membership survey, Chief John Kousik stated, "the results seem to indicate that we have a long way to go towards instilling community policing as philosophy within the Windsor Police Service." Pursuant to the Chief's statement, (then) Inspector William Stephens, officer in charge of the EECF at that time, issued a memorandum (October 23, 1997) in which he described an "environment" that helped to account for why "the personnel of the Service are not fully supportive of community policing initiatives." According to Stephens, in addition to general departmental morale problems stemming from government budgetary cutbacks and the aforementioned labour-management tensions, four events had undermined and set back CP efforts. First, the generalist constable role had been discontinued. Second, the EECF substation had been closed, an event "seen as a major victory among some of our personnel opposed to community policing initiatives" (even though, as noted earlier, the closure was accompanied by the actual expansion of CP). Third, major staffing reductions had occurred at both CP units. Finally, CP constables and supervisors had endured abuse ("some lighthearted and some serious") regarding their assignments. Stephens concluded, "looking back to 1990 ... our community policing efforts [have declined] in terms of assigned staff numbers, the ability to perform proactive work, and the level of meaningful recognition from senior staff."

Inspector Stephens' analysis was not questioned in two subsequent meetings about the 1997 survey involving the researchers and senior management. Essentially several policy decisions had been made that undercut and weakened the service's CP strategy and, consequently, reinforced extant opposition to CP. By the end of the second meeting, the Chief had formed a committee of three inspectors to address the service's community policing needs. One step taken by the committee was to drop the term "community policing" from official service policy because of its negative connotation among many personnel. The term was replaced by "service delivery" focusing on community needs. However, in its service delivery mode, the ser-

vice would continue to adhere to CP principles and objectives. As well, staff sergeants at headquarters were assigned new roles as problem-solving leaders. The Director of Planning and Research (third author) took additional training in CP evaluation, and the service's planned 1999 strategic refit was scheduled to identify future evaluations. In addition, the STCP would soon relocate to a new building that, uniquely, would also house a primary school, daycare centre, and public library.

CONCLUSION

Since the first CP initiative in the Windsor Police Service, evaluation research has served an important function in providing relevant process and outcome evidence. The research serves as a good example of police-university collaboration as all studies involved (varying degrees of) input from representatives of both institutions. We have considered not only the evaluation evidence but the contribution of the evidence to the service's policy decisions.

The findings were generally positive concerning the initial year of the STCP and EECF. There was evidence that the CP patrol constables had changed their policing styles in a more proactive, community-involved direction with improvement in several crime indicators as well as the attitudes of CP constables, business managers, and residents. Thus, the early results supplement the gradually accumulating evidence in Canada and elsewhere of the potential efficacy of CP (Normandeau, 1998; Rosenbaum, 1998). However, the years following the initial evaluations witnessed setbacks to the service's CP efforts (e.g., staffing reductions and elimination of the generalist constable role). The 1997 membership survey (keeping in mind the low 30% participation rate) suggested that most members had not enthusiastically embraced CP.

That the Windsor Police Service has not undergone a smooth transition to CP is consistent with the experiences of police departments across North America. There are very few examples of police organizations that have successfully completed the transition from traditional, response-centred policing, a transition that entails a substantial alteration of both policing philosophy and policing strategy (Greene, 1998; Moore, 1994). Membership resistance to such organizational change can be intense. Greene (1998) notes that a prevalent finding is the "intractability of police organizations in their adoption of community policing" (p. 145).

Most advocates of CP agree that successful transition to CP requires department-wide structural change, including decentralization and layering of authority with greater autonomy and responsibility for front-line patrol officers (e.g., Leighton, 1991; Moore, 1994; Trojanowicz & Bucqueroux, 1994). One essential change demanded by the redefinition of the patrol officer role involves the criteria for assessing effective police performance. Skills and abilities required to execute CP must be recognized by the organization's reward system, including performance evaluations, promotions, and personnel selection (Roberg, 1994; Seagrave, 1996; Trojanowicz & Bucqueroux, 1994). As Leighton (1991) affirms, "Unless the reward structure is changed ... CP strategies and tactics will not be implemented in other than a cosmetic manner" (p. 506).

The failure to alter the reward structure vis-a-vis the contributions of CP officers was acknowledged by Windsor's leadership in the meetings about the 1997 survey. Nonetheless, appreciable movement in this direction is essential to the diffusion of member resistance and the unequivocal affirmation of the service's long-term commitment to CP. Unless a police organization takes these steps to accomplish the full integration of CP in its structure and operations, the resolve of CP opponents will strengthen and the "confrontation of paradigms" (i.e., CP vs. traditional) will persist (Bayley, 1993).

The leadership of an organization plays a vital role in promoting or restricting the organizational restructuring called for by CP (Loree, 1988; Seagrave, 1996). However, taking the step from program implementation to organizational restructuring is difficult for police executives (Mastrofski, 1998). For instance, a survey of all municipal police leaders ($N = 31$) in British Columbia suggested support for the movement to CP (including the implementation of CP programs), but little commitment to fundamental organizational change (Seagrave, 1996).

As CP continues to spread in Canada and becomes more strongly entrenched in policing ideology and policy, the consequences of insufficient evaluation research become increasingly serious. The lack of widespread, systematic evaluation of CP in Canada contrasts markedly with the scope of research being done in the United States (e.g., "The Crime Act," 1996), including the National Institute of Justice's research partnership programs in which the police and local researchers (usually from universities) share responsibility for the design and execution of research (McEwen, 1999).

As our research in Windsor suggests, CP initiatives require regular monitoring beyond the developmental phases (Kennedy, 1993). The monitoring must attend not only to outcome criteria but to the implementation process: what actually is being done in the community in the name of CP (McElroy, 1998; Nancoo, 1993). Feedback on both process and outcome is needed to determine if what is happening is consistent with program design (process feedback) and program objectives (outcome feedback). As McElroy (1998) has observed, when it comes to CP, all too often there is a big gap between program design and actual implementation. Thus, if a CP program stipulates that patrol constables engage the community in problem identification and solution, then an effective evaluation would assess (a) the steps the constables took to involve members of the community in the problem identification-solution process, (b) how members of the community responded, and (c) the extent to which problems were identified and co-operatively ameliorated. Moreover, the criteria for evaluating an organization's CP strategy must be broad-based, including not only those relevant to specific programs, but the extent to which the organization has undergone appropriate restructuring, and CP has been integrated on an organization-wide basis (Leighton, 1991).

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NOTES

1. For all surveys reported in this article, respondents did not identify themselves and, accompanying each survey, was a letter from the Chief encouraging the assistance of the prospective participant.
2. For all the analyses reported in this article, statistical significance was set at the .05 level. Also, all parametric statistics entailed two-tailed tests.
3. Although not addressed in this report, in addition to its CP patrol initiatives, the service has longstanding involvements in and com-

mitments to a number of specific police-community partnership programs (e.g., Neighbourhood Watch and Teen Drop-in Centres).

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