

THE MAKING OF A COMMUNITY POLICING OFFICER: THE IMPACT OF BASIC TRAINING AND OCCUPATIONAL SOCIALIZATION ON POLICE RECRUITS

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This study examines the impact of basic training, field training, and work environment on shaping police recruits' attitudes and beliefs related to community policing, problem-solving policing, and police public relations. A multiple-treatment, single-case pretest-posttest design was used to survey 446 police recruits from 14 successive basic-training academy classes at the Phoenix Regional Police Training Academy. The sample of police recruits was followed through the 606.5-hour, 16-week basic-training program and then through field training and the completion of a 1-year probationary period. Over 16 months, they were surveyed at four points and times. Findings reveal that although the training academy has a positive impact on police recruits' attitudes related to community policing and problem solving, over time, those positive attitudinal changes dissipate as police recruits proceed to their respective police agencies where they are assigned a field training officer and are exposed to the work environment and organizational culture.

During the last decade of the 20th century, there was a widespread movement initiated by a growing number of police administrators across the nation, as well as the Department of Justice, the Community Oriented Policing Services Office (COPS), and the Crime Act of 1994 to replace the

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traditional law enforcement model of policing with models of policing that encompass a combination of incident-driven policing, traditional policing tactics, and community policing and problem-solving philosophies and strategies (Couper & Lobitz, 1991; Trojanowicz & Bucqueroux, 1989; Wilkinson & Rosenbaum, 1994; Wycoff & Skogan, 1993). In both theory and practice, these newer models of policing (i.e., community policing and problem-oriented policing) call for a fundamental change in the basic role of police officers, including changes in the day-to-day activities, interactions, and skills of officers, well beyond the traditional roles for which police are commonly hired, trained, and evaluated (Buerger, Petrosino, & Petrosino, 1999; Lurigio & Rosenbaum, 1994). According to Buerger et al. (1999, p. 127), community policing and problem-oriented policing models do not eliminate or downplay the importance of the traditional model of control (i.e., confront, command, and coerce to establish and maintain authority and presence) but rather places officers in situations and partnership with the community in which the traditional model of control is irrelevant and counterproductive. Instead, community policing and problem-oriented policing models require officers to participate, promote, and persuade interested community stakeholders to come together and take action, and requires officers to mediate between conflicting parties and interests.

REFORM TRAINING: TRAINING THE POLICE IN ALTERNATIVE POLICING STRATEGIES

To effectively implement community policing, police departments must make it a priority to educate police officers in the theories and practices of community policing and problem-oriented policing, as well as train and encourage officers to translate program elements into actual field activities (Bradford & Pynes, 1999; Dantzker, Lurigio, Hartnett, Houmes, & Davidsdottir, 1995; Lurigio & Rosenbaum, 1994; Lurigio & Skogan, 1994; Rosenbaum, Yeh, & Wilkinson, 1994; Sadd & Grinc, 1993; Wilkinson & Rosenbaum, 1994; Wycoff & Skogan, 1993, 1994). Concomitantly, over the past several years, extensive efforts have been made by police administrators, police training specialists, and criminal justice scholars to redefine and redevelop police training programs and curricula around community policing and problem-oriented policing philosophies (see Dantzker et al.,

emy, the 446 police recruits, and the 25 Arizona police agencies that participated in this study. Thanks are also extended to Vincent Webb and David Schaefer for help and advice related to data analysis and earlier drafts of this final report.

1995). In fact, the COPS has expended substantial financial resources to developing and delivering training to law enforcement personnel in support of community policing through the development of an extensive network of Regional Community Policing Institutes.

According to Buerger (1998), in much of the community policing training that is being delivered across the United States, the balance between training to change attitudes and beliefs and skills training to do community policing is uneven. Most of the emphasis has been placed on changing officers' attitudes, and there are few skills training components that would mark or facilitate the necessary change in police officers' behavior. This imbalance in training may, in part, exist because community policing training has been marketed as a philosophy and a fight for the hearts and minds of the ordinary patrol officer rather than a process of providing police with a set of skills and techniques. To achieve the level of support from police personnel that is necessary to move community policing beyond rhetoric to actual practice and effecting meaningful change, both Buerger (1998) and Wilkinson and Rosenbaum (1994) argue that fundamental changes need to be made to existing training programs, at all levels of the police organization.

Police training academies, responsible for delivering basic police officer training, have responded to the call to deliver community policing training by incorporating modules and materials designed to instill attitudes and beliefs in police personnel that are consistent with community policing philosophies. In a study of community policing training efforts across the United States, the Institute for Law and Justice (McEwen, Webster, & Pandey, 1997) found that training academies have incorporated community policing training into their recruit training in several ways, including adding new recruit courses related to community policing and/or incorporating community policing philosophies and practices into some or all recruit courses.¹ Although the list of community policing courses varied, the most common courses were designed to inform recruits about community policing philosophies and concepts, problem-solving techniques, dealing with special populations, how to build police-community relations, team building and leadership, communication skills and tactics, and patrol techniques and beat profiling.

In 1995, mandated by the Arizona's Police Officers Standard Training (POST) Board and the Arizona Law Enforcement Academies (ALEA) users group, the Phoenix Regional Police Training Academy revised its basic-training curriculum and implemented a 606.5-hour, 16-week basic-

training program that integrates community policing and problem-oriented policing across the curriculum.² The integrated curriculum was designed to provide a range of supportive concepts and skills that police officers can use to do police work, including teaching officers the benefits and methods of developing positive police-community relations and that community policing techniques are beneficial in dealing with crime problems. The goals of the redesigned basic-training program, in addition to developing basic proficiency in police tactical skills and knowledge of departmental procedures and laws, are to: increase support for the use of traditional policing tactics and processes; increase support for community policing philosophies and practices; develop more favorable attitudes toward problem-oriented policing; improve problem-solving capabilities; and develop more favorable attitudes toward building positive police-public relationships. This revised basic-training program is fairly typical and is a form of “reform training” being used by numerous agencies throughout the United States (see Buerger, 1998; McEwen, 1997).³

Bradford and Pynes (1999) contended that despite police academy attempts to incorporate community policing and problem-solving policing training into basic-training curricula, police academy training has changed very little since 1986. In fact, after an examination of syllabi and curricula from 22 police academies across the United States, Bradford and Pynes concluded that less than 3% of basic-training academy time is spent on cognitive and decision-making domains (e.g., simulated scenarios, effective communication, and decision making based on reasoning and application of knowledge and skills). More than 90% of basic academy training time is spent on task-oriented training that instructs police recruits in the basic repetitive skills and conditioned responses associated with the reactive nature of the traditional model of policing. Likewise, Buerger (1998) maintains that recruit training still tends to focus on the basic everyday skills and legal training—use of criminal and motor vehicle codes, defensive tactics, firearms, defensive and pursuit driving, report writing—needed to perform police work, despite attempts to integrate reform training into basic police training and field training.

In light of the extensive efforts and resources devoted to redefining and redeveloping police training programs and curricula around community policing and problem-solving policing philosophies, it is surprising that few empirical studies have examined the direct effects of community-policing training on individual police personnel (Boydstun & Sherry, 1975; Greene & Decker, 1989; Hayeslip & Corder, 1987; Lurigio & Rosenbaum,

1994; Lurigio & Skogan, 1994; Rosenbaum et al., 1994; Schwartz & Clarren, 1977; Skogan, 1990; Trojanowicz, 1982, 1983; Weisburd, McElroy, & Hardyman, 1988; Wilson & Bennett, 1994; Wycoff & Skogan, 1993, 1994). Even fewer studies have examined the direct effects of basic-training programs that have integrated community policing and problem-oriented policing philosophies and strategies into its curriculum on police recruits (Bradford & Pynes, 1999). Thus, the level of training, type of training, and information exchange that is needed to achieve support for community policing and problem-oriented policing among police officers is still being explored (see Buerger, 1998; Dantzker et al., 1995; Rosenbaum et al., 1994; Wilson & Bennett, 1994; Wycoff & Skogan, 1994).

SUSTAINING ATTITUDE CHANGE OVER TIME

If basic training is successful in instilling cognitive changes that are supportive of community policing and problem-solving policing, what is required to sustain such cognitive changes? According to Mastrofski and Ritti (1996), an organization that wishes to benefit from the institutional function of training will tightly couple the training with other organizational structures and day-to-day work activities. Moreover, Mastrofski and Ritti theorize that intense and high-quality training may quickly dissipate once officers are exposed to the powerful effects of everyday work, the organization, and the occupational culture of more experienced and veteran coworkers. Thus, police recruits exposed to community policing and problem-solving policing training in the basic-training academy may find little value in those activities if, on graduation from the training academy and entrance into the police agency, field-training officers (FTOs) and the department afford them few opportunities to apply it, supervisors discourage it, and it is irrelevant for career advancement. For instance, McEwen (1997) found that among 532 law enforcement agencies that use FTOs, only 23% of these agencies require FTOs to have at least a knowledge of community policing and/or have demonstrated community policing skills. In addition, only 25% of the police agencies provide FTOs with specialized community policing training designed to help them train police recruits in community policing and problem-solving policing.

Community policing models further theorize that police departments with organizational structures and programs in place to support community policing and job designs that engage line officers in community policing and problem-solving practices should have greater success in sustaining

officer attitudes that are supportive of community policing and problem-solving policing. In addition, these organizational and job responsibility changes are expected to change the daily activities of police officers and consequently lead to community policing and problem-solving initiatives that are expected to improve officers' attitudes, knowledge, and skills related to community policing and problem-solving policing, as well as change the nature of their relationship with the public (Lurigio & Skogan, 1998; Rosenbaum & Wilkinson, 1994; Wilson & Bennett, 1994; Wycoff & Skogan, 1993; see also, Rosenbaum, 1994).

A review of the community policing literature reveals that despite the importance of community policing training, the effects of such training on officers has not been fully explored. In fact, the following three general questions remain unanswered: Does a police training academy that integrates community policing and problem-solving principals throughout the basic-training curriculum have success in increasing police recruits' support for and orientation to community policing and problem-solving policing? Do police departments with organizational structures and field-training processes in place to engage new officers in community policing and problem-solving practices have greater success in sustaining officer attitudes that are supportive of community policing and problem-solving policing? Do individual characteristics and other potential influences (e.g., preexisting attitudes) help explain changes in police recruits' attitudes toward community policing and problem-solving policing in the earliest stages of their police career? In an effort to answer these questions and address a gap in the literature, this study was designed to assess the impact of basic training, field training, and work environment on police recruits' attitudes related to community policing, problem-solving policing, and police-public relations.

METHOD AND DATA

To accomplish the objectives of the study, a panel sample of 446 police recruits were followed through the 606.5-hour, 16-week Phoenix Regional Police Training Academy basic-training program, and then to their respective police agencies where they proceeded through field training and the completion of a 1-year probationary period. More specifically, the panel sample of 446 police recruits was selected from 14 successive basic-training academy classes that began between December 1995 and October 1996.⁴ On entering the training academy (i.e., on the first day at the academy), each

police recruit was pretested (Time 1). Training academy administrators provided researchers with 1 hour of class time during which the survey was administered and collected immediately on completion. The pretest measured police recruits' baseline attitudes toward traditional policing, community policing philosophies and strategies, problem-solving techniques, and the importance of building positive police-public relations.

A 16-week lag existed between the pretest and the first posttest (Time 2), which was conducted during the final 3 days of the basic-training academy. From the original sample, 389 recruits of 446 completed the posttest at Time 2. Because the purpose of the training academy was to instill and shape police recruits' attitudes to be supportive of community policing, problem-solving policing, police-public relations, and traditional policing, measures of attitudes were compared from Time 1 to Time 2.

Because continued assessment throughout the field-training and occupational socialization processes were an essential part of the research design, a second posttest (Time 3) was conducted at or near the end of the recruits' field-training process, 12 weeks after the first posttest. At this stage of the research, recruits were tracked to their respective police agency. Exactly 356 police recruits completed the Time 3 survey, which was administered in a face-to-face setting between June 1996 and March 1997. The second posttest was an important part of the research inasmuch as it revealed the impact of field training, work environment, and disparate community policing approaches on officers' attitudes. To reveal such impacts, officers' attitudes were compared from Time 2 to Time 3.

Finally, a third posttest (Time 4) occurred after police recruits completed 1 year of employment in their respective police agency. Exactly 292 police recruits completed the Time 4 survey, which was administered in a face-to-face setting between March 1997 and February 1998. Police recruits' attitudes after completing 1 year of employment in their respective police agency were compared to those at Time 1 and Time 2 to determine the magnitude and direction of change over time.

POLICE PERSONNEL SURVEY: MEASUREMENT AND SCALE CONSTRUCTION

The main component of the research was an extensive survey instrument, adopted from Rosenbaum et al.'s (1994) evaluation of community policing in Joliet, Illinois and Lurigio and Skogan's (1994, 1998) evaluation of community policing in Chicago, Illinois. The Police Personnel Survey included

questions that formed scales that measured factors such as officers' support for community policing and traditional policing, orientation to community policing and problem-solving policing, problem-solving capabilities, and attitudes toward police-public relations. Each of these multi-item scales reflect the influence of extensive research into community policing and problem-solving policing (Lurigio, 1995; Lurigio & Skogan, 1998; Rosenbaum, 1994; Wycoff & Skogan, 1993). Moreover, the construct validity of these multi-item scales have been confirmed in the work of Lurigio and Skogan (1994, 1998) and Rosenbaum et al. (1994) through a variety of evaluation studies designed to evaluate the impact of community policing on police personnel. In this study, the Police Personnel Survey was administered at the pretest and each of the posttests to assess the extent of stability and/or change in recruits' attitudes as they advanced through basic training and the first year of their police careers.

Table 1 identifies the multi-item scales used in this study and the constructs that they measure, and provides the alpha statistics, the number of items included in each scale, and the Likert-type scale used to measure the scale items. Scale items are positively keyed so that larger summated scores reflect a stronger position on the scale dimension than do smaller scores. The alpha statistics, reflecting the reliability of the various scales, ranged from .572 to .888; all but three were above .70.⁵

To sort out how the effects of training and socialization are impacted by the individual characteristics of police recruits, the Police Personnel Survey was also designed to collect data on the individual characteristics of police recruits. These characteristics include the following: gender, race/ethnicity, age, prior military experience, prior law enforcement experience, marital status, and highest level of formal education completed.

Descriptive statistics for the panel sample of police recruits used in this analysis are presented in Table 2. As can be seen, the size and characteristics of the sample changed over time as police recruits dropped out of police work and/or the study.⁶ Males are overrepresented in the sample, composing at least 88% of the sample at any point in time. In addition, Whites compose at least 76% of the sample, Hispanics make up on average 11.5% of the sample, and Blacks make up 3%. The majority of the sample is between 20 and 30 years of age and had completed some college or a 4-year bachelor's degree. Finally, the majority of recruits included in the sample were hired by Phoenix metropolitan area police agencies; more specifically, police recruits hired by the Phoenix Police Department made up 54.5% ($n = 243$) of the sample at Time 1 and 58.5% ($n = 169$) of the sample at Time 4.⁷

TABLE 1. Scale Descriptions and Reliabilities

Community policing related scales	
Support for COP:	Officers' attitudes regarding the allocation of agency resources to activities and services in keeping with the philosophies and strategies of community policing (alpha = .820, 10 items; 4-point Likert-type).
Orientation to COP:	Officers' opinions about community policing activities and their effectiveness (alpha = .685, 9 items; 5-point Likert-type).
Police-community relations scale	
Police-public relations:	Officers' perceptions about police-citizen relations and citizens' views and opinions of the police (alpha = .771, 7 items; 5-point Likert-type).
Problem-solving policing scales	
Orientation to PSP:	Officers' opinions about problem-solving activities and their effectiveness (alpha = .718, 10 items; 5-point Likert-type).
Problem-solving capability:	Officers' perceptions concerning their ability to perform problem-solving-related activities (i.e., engaging in each step of the S.A.R.A. model) (alpha = .857, 5 items; 5-point Likert-type).
Traditional policing related scale	
Support for TP:	Officers' attitudes regarding the allocation of agency resources to activities and services in keeping with traditional policing (alpha = .572, 4 items; 4-point Likert-type).
Coworker attitudes scales	
Coworker support for COP:	Degree to which officers feel their coworkers support community policing activities (alpha = .888, 1 items; 4-point Likert-type).
Coworker support for TP:	Degree to which officers feel their coworkers support traditional policing activities (alpha = .587, 4 items; 4-point Likert-type).

Note: COP = Community Oriented Policing Services Office; TP = traditional policing; S.A.R.A = scanning, analysis, response, and assessment; PSP = problem-solving policing.

SURVEY OF POLICE AGENCIES

Another component of this longitudinal study involved a survey of police agencies across the State of Arizona that had police recruits in the final sample. Police agencies included metropolitan police agencies, small town/rural police agencies, sheriff offices, Indian tribal police agencies, and university police agencies. The Community Policing Survey developed by Mary Ann Wycoff (1993) was used to measure work environment and how police agencies conceptualized and implemented community policing.⁸ Between June 1996 and March 1997, the Community Policing Survey was administered to 21 of the 25 police agencies. More specifically, the survey was administered to police chiefs from 19 of the police agencies and 10 precinct/district commanders from 2 of the 25 police agencies.⁹ A total of 15 police chiefs and 6 precinct commanders completed and returned the Community Policing Survey, establishing an overall response rate of 72.4%.

TABLE 2. Characteristics of the Panel Sample by Time (in %)

<i>Characteristic</i>	<i>Time 1: Enter Academy (N = 446)</i>	<i>Time 2: Exit Academy (N = 389)</i>	<i>Time 3: End Field Training (N = 356)</i>	<i>Time 4: End 1 Year (N = 292)</i>
Gender				
Male	89.7	88.4	88.5	90.1
Female	10.3	11.6	11.5	9.9
Race/ethnicity				
White/Caucasian	76.8	79.4	79.5	81.4
Black/African American	3.2	3.7	3.9	3.4
Hispanic/Latino	12.8	12.0	11.0	10.3
Asian American	2.5	2.9	3.4	2.8
Native American	3.2	0.8	0.6	0.0
Other	1.6	1.3	1.7	1.7
Age				
20 to 25 years old	47.7	45.2	42.9	31.3
26 to 30 years old	32.3	34.1	36.2	44.1
31 to 35 years old	12.3	13.7	13.0	14.8
36 to 40 years old	4.1	3.4	4.2	5.2
41 and over	2.9	3.6	3.7	4.5
Level of education				
High school/GED	9.0	5.9	5.4	4.8
Technical school	4.1	2.3	1.1	1.7
Some college	48.4	52.1	51.9	51.2
Bachelor's degree	35.1	37.4	37.6	40.6
Graduate degree	3.4	2.3	4.0	1.7
Police agencies				
Phoenix Police Department	54.5	56.9	57.2	58.5
Suburban Phoenix agencies	23.6	24.3	25.2	28.2
Rural Arizona agencies	11.7	11.1	11.5	8.2
Indian tribal agencies	4.9	2.8	2.2	2.4
University agencies	2.2	2.3	2.8	2.7
Other agencies	3.1	2.6	1.1	0.0

Among the 15 police chiefs and 6 precinct commanders who responded to the survey, 71.4% ($n = 15$) reported their agency had already implemented community policing, and 23.8% ($n = 5$) reported their agency was in the process implementing a community policing approach. Although the majority of police agencies had implemented community policing, only 19% ($n = 4$) of the respondents reported having departmental policies to support community policing. On the other hand, 57% ($n = 12$) of the respondents reported their agency had or were in the process of developing written policies concerning police interactions with citizens, 52% ($n = 11$) had or

were in the process of developing written policies concerning procedures to deal with neighborhood problems, and 42.9% ($n = 9$) had or were in the process of developing written policies concerning police interactions with other government agencies. Furthermore, 52.4% ($n = 11$) of the respondents reported their agency measures its progress or success at community policing on the basis of published departmental goals or objectives.

EXPECTATIONS

As previously stated, the goal of the Phoenix Regional Police Training Academy's basic-training program is to bring about initial positive changes in police recruits' attitudes toward community policing, problem-solving policing, police-public relations, and traditional policing. So, if the academy's basic-training program was effective, one would expect police recruits to have more positive attitudes toward community policing, problem-solving policing, police-public relations, and traditional policing when they exit the training academy compared to when they entered the training academy. One would also expect to see police recruits' attitudes toward community policing, problem-solving policing, police-public relations, and traditional policing increase or at least remain the same as they proceed through the field-training phase and complete their 1-year probationary period.

DATA ANALYSIS

The first step in the analysis was to assess the impact of basic training, field training, and work environment on police recruits' attitudes related to community policing, problem-solving policing, police-public relations, and traditional policing. One-way analysis of variance and multiple regression were used. In the one-way analysis of variance, the dependent variables are difference scores (i.e., Time 2 minus Time 1, Time 3 minus 2, Time 4 minus Time 2, and Time 4 minus Time 1 scores for individual respondents) for each of the scales. This analysis allows us to determine if any changes in police recruits' attitudes were significant, as well as determine the direction of change in recruits' attitudes over time. Finally, multiple regression models are used to investigate the effects of basic training, field training, and occupational socialization while controlling for individual characteristics, organizational environment factors, and other potential influences such as academy class and preexisting attitudes.

RESULTS

CHANGE OVER TIME IN POLICE RECRUITS' ATTITUDES

Table 3 reveals significant changes in mean scores on many of the scales. To begin, we note some significant differences in police recruits' attitudes between Time 1 (preacademy) and Time 2 (exit academy). According to expectations, on completing basic training, police recruits expressed more positive attitudes toward both community policing and problem-solving policing, they felt more qualified to engage in problem-solving tasks related to the 4-stage problem-solving S.A.R.A. model (i.e., scanning, analysis, response, and assessment), and they were more supportive of allocating agency resources to traditional policing strategies. As expected, the Phoenix Regional Police Training Academy had a positive impact on police recruits' attitudes related to community policing, public-public relations, problem-solving policing, as well as traditional policing. Bear in mind that although the impact is significant, the change is small.

Police recruits' attitudes continued to change after they left the training academy and returned to their respective police agencies where they completed field training. Unfortunately, the positive gains that the training academy had made in shaping police recruits' attitudes toward community policing and problem-solving policing were lost by the end of the field-training process. In particular, at the end of field training (Time 3), police recruits believed that fewer resources should be devoted to community policing, expressed less favorable views toward community policing and its effectiveness, and felt less qualified to engage in problem-solving tasks related to the S.A.R.A. model. Between Time 2 and Time 3, the only positive attitude change that occurred was that police recruits developed more positive views of police-public relations.

After completing field training, police recruits then proceeded to complete a 1-year probationary period during which their attitudes continued to change. By the end of their first year on the job (Time 4), police recruits held more negative attitudes toward community policing and problem-solving policing and felt that fewer resources should be devoted to community policing, than they did at the end of academy training (Time 2). The positive gains the training academy made in increasing police recruit support for community policing and problem-solving policing was not sustained once police recruits returned to their respective police agencies. Police recruits did, however, express more favorable views of police-public relations after

TABLE 3. Scale Means Over Time With Comparisons

<i>Scale</i>	<i>Time 1: Enter Academy</i>	<i>Time 2: Exit Academy</i>	<i>Time 3: End Field Training</i>	<i>Time 4: End 1 Year</i>	<i>Overall F Test</i>
Community policing related scales					
Support for COP	30.88	31.29	29.73 ^b	29.25 ^{c,d}	17.75**
Orientation to COP	35.51	36.53 ^a	34.99 ^b	34.82 ^{c,d}	19.93**
Police-community relations scale					
Police-public relations	21.31	21.54	22.15 ^b	22.31 ^{c,d}	6.87**
Problem-solving policing scales					
Orientation to PSP	35.25	35.78 ^a	35.49	35.03 ^c	2.47
Problem-solving capability	13.96	14.98 ^a	14.31 ^b	14.82 ^d	19.29**
Traditional policing related scale					
Support for TP	13.66	13.98 ^a	13.99	13.88	4.26**

Note: *T* tests were used to compare across the different times. COP = Community Oriented Policing Services Office; TP = traditional policing; PSP = problem-solving policing.

a. Change from Time 1 to 2, $p \leq .05$.

b. Change from Time 2 to 3, $p \leq .05$.

c. Change from Time 2 to 4, $p \leq .05$.

d. Change from Time 1 to 4, $p \leq .05$.

1 year on the job than they did at the end of academy training. This finding suggests that as police recruits develop a streetwise competence and recognize that to “get the job done” or “do the job better,” they must interact with the community and work on developing positive police-public relations.

An overall assessment of changes in police recruits attitudes from Time 1 (preacademy) to Time 4 (end of first year) reveals that police recruits entered the training academy with more supportive views of community policing than they possessed after 1 year on the job. This means that police recruits’ support of community policing can quickly dissipate if training and programs are not in place to reinforce such attitudes. The only positive attitudinal changes that occurred between Time 1 and Time 4 were those related to police-public relations and problem-solving capabilities. Although the change on these scales was significant, the magnitude of change was small.

PREDICTORS OF CHANGE IN POLICE RECRUITS’ ATTITUDES

Next, multiple regression analysis was used to assess the strength of basic academy training, field training, and occupational socialization in ex-

plaining changes in police recruits' attitudes while controlling for individual characteristics, organizational environment factors, and other potential influences (e.g., academy class and preexisting attitudes). The metrics for the independent variables or predictors included in the analyses are described below.

- Age. Actual self-reported age of recruits at Time 1.
- Education. Coded 1 if recruit had a bachelor's degree or higher; 0 if recruit had less than a bachelor's degree.
- White/Caucasian. Coded 1 if recruit was White/Caucasian; 0 if recruit was non-White/racial minority.
- Sex. Coded 1 if the recruit was male; 0 if the recruit was female.
- Prior law enforcement experience. Coded 1 if the recruit had prior law enforcement experience; 0 if recruit had no prior law enforcement experience. This variable was included to account for the possibility that prior law enforcement experience would be especially important in shaping recruits' attitudes.
- Prior military experience. Coded 1 if recruit had prior military experience; 0 if recruit had no prior military experience. This variable was included to account for the possibility that prior experience in a military organization might be similar enough to that in a quasi-military police organization and produce an effect similar to that of prior law enforcement experience.
- Baseline level. The baseline level or mean score at Time 1 (preacademy). This variable provides a basis for assessing the relative impact of preacademy attitudes on change in those attitudes. This helps to get at the question of whether academy training, field training, and/or occupational socialization can significantly overcome the attitudes that police recruits bring with them to the academy, and change them in a direction that is more consistent with community policing philosophies and values.
- Agency. The police agencies from which recruits originated were grouped into one of three categories and treated as an indicator variable. "Phoenix PD" includes all recruits from the Phoenix Police Department; "Suburban Phoenix" includes recruits from the other police agencies in the greater Phoenix metropolitan area. Recruits from police agencies other than the Phoenix PD or Suburban Phoenix were placed in a third category that served as the reference or excluded category for the other two categories. These categories serve as referents for several police organizational characteristics such as size, complexity of the police organization, workload, calls for service, and crime levels. The reference/excluded category was coded 0, and the included category was coded 1.
- COP rank: Patrol officer responsibility. The Community Policing Survey was used to rank police agencies as high or low on requiring the patrol officer to be involved in community policing activities. Police agencies were coded 1 if they ranked high; 0 if they ranked low. This category serves as a referent for work environment and implementation of community policing.
- COP rank: Organizational arrangements. The Community Policing Survey was also used to rank police agencies as high or low on having organizational arrangements/structures in place that support community policing philosophies. Police agencies

were coded 1 if they ranked high on the organizational arrangements/structures scale; 0 if they ranked low. This category also services as a referent for work environment and implementation of community policing.

- COP rank: Citizen participation. The Community Policing Survey was also used to rank police agencies as high or low on the level of citizen participation in the police department. Police agencies were coded 1 if they ranked high on the citizen participation scale; 0 if they ranked low. This category serves as a referent for implementation of community policing.
- Coworker support for community policing. This is the mean score at Time 4 (end of 1 year) of police recruits' views of their coworkers' support for community policing. This variable provides a basis for assessing the impact of coworker attitudes on change in police recruits attitudes. This helps to get at the question of whether coworkers' attitudes and beliefs, to which police recruits are exposed to during the field-training and occupational socialization processes, can significantly impact the attitudes of police recruits.
- Coworker support for traditional policing. This is the mean score at Time 4 (end of one year) of police recruits' views of their coworkers' support for traditional policing. This variable provides a basis for assessing the impact of coworker attitudes on change in police recruits attitudes.
- Shift. The shift to which recruits were assigned at Time 3 (end of field training) and Time 4 (end of 1 year) were grouped into one of four categories (1st shift, 2nd shift, 3rd shift, and other shifts). The 1st shift (6 a.m.-4 p.m.) was coded 0 and served as the reference or excluded category for the other three categories, which were coded 1. These categories serve as referents for several police organizational characteristics such as workload, calls for service, and opportunities to engage in community policing.
- Academy class. The academy class for each recruit was treated as an indicator variable and coded 1 if the recruit was in the class; 0 if not. Recruits from 14 different academy classes participated in the study, and the first class of recruits was treated as the excluded category in the regression models. Recruit class was included to capture the possibility that recruits who trained together for 16 weeks could possibly develop a unique training class culture that could influence recruit attitudes. For example, it would be reasonable to expect that a recruit sergeant and the makeup of the recruit class (i.e., a recruit class with a number of police recruits with prior law enforcement or military experience, or a recruit class with recruits from only the Phoenix PD or from numerous police agencies) might have an impact on individual recruits.

REGRESSION ANALYSIS: ATTITUDE CHANGE DURING ACADEMY TRAINING

Table 4 reveals the results of the multiple regression analysis that was used to assess the strength of academy training in explaining changes in police recruits' attitudes, while controlling for individual characteristics, organizational environment factors, and other potential influences (e.g., academy class and preexisting attitudes). Each of the models in Table 4

TABLE 4. Regression Analysis of Attitude Change During Academy Training (From Time 1 to Time 2)

<i>Independent Variable</i>	<i>Dependent Variable (Beta)</i>					
	<i>Change in Support for COP</i>	<i>Change in Orientation to COP</i>	<i>Change in Police-Public Relations</i>	<i>Change in Orientation to PSP</i>	<i>Change in PSP Capability</i>	<i>Change in Support for TP</i>
<i>Individual characteristics</i>						
Age	.068	-.00	-.01	-.05	.04	.05
Education	-.14*	-.01	-.01	-.01	-.02	-.10
White/Caucasian	-.09	-.02	.07	.05	-.03	.04
Gender	-.01	-.10	-.03	-.03	-.04	.02
Prior law enforcement experience	.03	.06	-.07	-.04	.01	.01
Prior military experience	-.08	.01	.07	-.07	-.01	.00
Baseline level	-.41**	-.45**	-.40**	-.44**	-.73**	-.53**
<i>Organizational environment</i>						
Agency—Phoenix Police Department	-.15	.03	-.02	-.06	-.17	-.15
Agency—Suburban Phoenix	-.08	.02	.17	.11	-.15*	-.17
COP rank: Patrol responsibility	-.02	.13*	-.09	-.17**	.02	.03
COP rank: Organizational arrangements	-.00	-.01	-.02	.00	-.07	.09
COP rank: Citizen participation	.05	.02	.12	.11	.04	-.12
<i>Academy classes</i>						
Dummy—class 2	.14*	.01	-.09	-.08	-.03	.15
Dummy—class 3	.12	.07	-.15*	-.06	.05	.03
Dummy—class 4	.07	.08	-.02	-.07	-.05	.02
Dummy—class 5	-.12	.04	.05	-.10	-.09*	-.09
Dummy—class 6	.08	.01	-.08	-.08	.06	.02
Dummy—class 7	.12	.05	.09	.09	-.01	-.02
Dummy—class 8	.17*	.12	-.16*	-.06	-.06	.10

(continued)

TABLE 4. Continued

<i>Independent Variable</i>	<i>Dependent Variable (Beta)</i>					
	<i>Change in Support for COP</i>	<i>Change in Orientation to COP</i>	<i>Change in Police-Public Relations</i>	<i>Change in Orientation to PSP</i>	<i>Change in PSP Capability</i>	<i>Change in Support for TP</i>
Dummy—class 9	.12	.20**	-.05	-.04	-.01	.01
Dummy—class 10	-.02	.06	-.07	-.08	-.09*	-.01
Dummy—class 11	.08	.00	-.28**	-.14	-.14*	.09
Dummy—class 12	.06	.06	-.06	-.09	.04	.00
Dummy—class 13	.14*	.09	-.13	-.12	-.02	-.00
Dummy—class 14	.10	.00	-.27**	-.08	-.05	.06
<i>R</i> ² adjusted	.174**	.189**	.246**	.202**	.570**	.294**
<i>F</i>	3.60	3.88	5.05	4.14	17.41	6.14

Note: COP = Community Oriented Policing Services Office; TP = traditional policing; PSP = problem-solving policing.

p* ≤ .05. *p* ≤ .01.

explains a large proportion of the variance in the change in police recruits' attitudes during academy training. One of the most interesting findings is that, in each of the models, baseline level measures or preacademy attitudes emerge as the strongest predictor of the increase in police recruits' attitudes related to community policing, problem-solving policing, police-public relations, and traditional policing during academy. In other words, police recruits who entered the training academy with the view that fewer resources should be devoted to community policing and/or traditional policing were more likely to support funding community policing and/or traditional policing activities on exiting the training academy. Similarly, recruits who entered the training academy with less favorable attitudes toward community policing, problem-solving policing, and/or police-public relations were more likely to exit the training academy with more positive attitudes toward community policing, problem-solving policing, and police-public relations. In addition, police recruits who did not feel qualified to engage in problem-solving activities when they entered the training academy were more likely to exit the training academy with more confidence in their problem-solving capabilities. These findings provide support for the assumption that academy training had a positive impact on shaping police recruits' attitudes related to community policing, problem-solving policing, police-public relations, as well as traditional policing.¹⁰

In the change in support for community policing model, education also had a significant beta coefficient. Police recruits who held less than a bachelor's degree were more likely to increase their support for community policing during academy training than recruits with a bachelor's degree or higher. This, in part, may be because police recruits with less than a bachelor's degree were not as likely to enter the training academy with the knowledge or awareness that many police agencies are moving toward a model of policing that encompasses a combination of incident-driven policing, traditional policing tactics, and community policing and problem-solving policing philosophies and strategies; thus, they may have been more likely to think that community policing activities were outside the realm of police work.

Another interesting finding is that an agency's ranking on the patrol responsibility scale emerged as a weak predictor of the change in orientation to community policing and problem-solving policing. In other words, police recruits who were hired by police agencies that require patrol officers to engage in community policing were more likely to develop more

favorable attitudes toward community policing and problem-solving policing while at the training academy than recruits hired by agencies that do not require patrol officers to engage in community policing. This could mean that police agencies that require patrol officers to engage in community policing were more likely to hire individuals who were more receptive to community policing philosophies and practices, and/or that socialization of recruits into the organizational culture of a police agency begins early in a police officer's career, as early as the hiring process and/or academy training (see Van Maanen, 1977).

Finally, academy classes emerged as statistically significant variables in four of the models (see Table 4). This finding suggests that police recruits who train together for 16 weeks possibly develop a unique training class culture that influences recruits' attitudes. Class culture could be shaped by class sergeant and/or instructor differences from one class to the next; however, this study did not examine actual training practices per se. Differences in student composition from one class to another could also produce a dynamic or class effect that promotes or impedes the development of attitudinal and belief systems supportive of community policing, problem-solving policing, and police-public relations. For example, a class may have a number of police recruits with prior law enforcement and/or military experience, a bachelor's degree, older or younger recruits, and recruits from police agencies that ranked high or low on the community policing scales.

These findings provide support for the assumption that a combination of preacademy attitudes, individual characteristics, organizational environment factors, and other mediating factors (such as academy class) had a significant impact on shaping police recruits' attitudes related to community policing, problem-solving policing, police-public relations, and traditional policing during the earliest stages of their police careers.

REGRESSION ANALYSIS: ATTITUDE CHANGE DURING FIELD TRAINING

Next, multiple regression was used to assess the strength of field training in explaining changes in police recruits' attitudes, while controlling for individual characteristics, organizational environment factors, and other potential influences (see Table 5). One of the most interesting findings is that both preacademy attitudes and academy class had less of an impact in explaining the variance in changes in police recruits' attitudes during field

training, and organizational environment factors become more powerful forces in shaping police recruits' attitudes during this time. For instance, in the orientation to community policing model, the strongest predictors of the decrease in attitudes toward community policing during field training were organizational environment factors, such as 3rd shift (9 p.m.-7 a.m.), other shifts (e.g., 9 a.m.-5 p.m. and relief shifts), and agency ranking on the patrol responsibility scale. In other words, police recruits assigned to 3rd shift or other shifts at the end of their field-training process were more likely to express less favorable attitudes toward community policing than recruits assigned to 1st shift (6 a.m.-4 p.m.). Police recruits assigned to 3rd shift were more likely to maintain their support for traditional policing (see change in support for traditional policing model). In addition, recruits working in police agencies that do not require patrol officers to engage in community policing activities were more likely to hold less favorable attitudes toward both community policing and problem-solving policing at the end of field training. These variables explained only 5% of the variance in the change in orientation to community policing during field training.

The police-public relations model explained 8% of the variance in the change in recruits' attitudes toward police-public relations during field training. In this model, prior law enforcement experience, preacademy attitudes, and an agency's ranking on the patrol responsibility scale had significant beta coefficients. Accordingly, police recruits who held more negative views of police-public relations at the end of academy training were more likely to hold more positive views of police-public relations after field training. In addition, police recruits who had prior law enforcement experience, as well as those working in police agencies that require patrol officers to engage in community policing, were more likely to develop more favorable views of police-public relations during field training.

It is important to point out that the models in Table 5 explain a small proportion of the variance in the change in police recruits' attitudes during field training. The low adjusted *R*-squares in each of these models is largely based on the fact that the informal culture of police organizations and work groups seems to be a stronger predictor of the change in police recruits' attitudes during field training than more easily measured individual characteristics. Because it is difficult to develop survey items and scales that adequately quantitatively measure the various dimensions of the informal culture of a police organization and/or work group, it is impossible to estimate the full effect of the informal culture over the formal training.

TABLE 5. Regression Analysis of Attitude Change During Field Training (From Time 2 to Time 3)

<i>Independent Variable</i>	<i>Dependent Variable (Beta)</i>					
	<i>Change in Support for COP</i>	<i>Change in Orientation to COP</i>	<i>Change in Police-Public Relations</i>	<i>Change in Orientation to PSP</i>	<i>Change in PSP Capability</i>	<i>Change in Support for TP</i>
<i>Individual characteristic</i>						
Age	.01	.07	.10	.08	-.12	-.05
Education	.01	-.02	.07	-.02	.00	-.03
White/Caucasian	.00	-.10	-.05	-.02	.01	-.09
Gender	.07	.05	.02	-.03	.13*	.00
Prior law enforcement experience	.01	-.00	.14**	.07	-.02	-.05
Prior military experience	-.01	.02	-.10	.02	.03	.00
Baseline level	-.06	-.10	-.13*	-.16**	-.10	-.03
<i>Organizational environment</i>						
Agency—Phoenix Police Department	-.02	-.05	-.27	-.22	.13	.08
Agency—Suburban Phoenix	-.07	-.03	-.13	-.15	.25*	.10
COP rank: Patrol responsibility	-.06	-.17*	.16*	.20**	-.02	.07
COP rank: Organizational arrangements	.06	.09	-.05	.05	.09	.07
COP rank: Citizen participation	-.01	.04	.17	.08	-.13	.05
2nd shift	-.07	.20	-.01	-.04	.02	-.19
3rd shift	-.00	.17*	-.05	-.12	-.11	-.19*
Other shifts	.04	.20*	-.02	-.01	.03	-.07
<i>Academy classes</i>						
Dummy—class 2	-.05	-.06	-.07	.06	-.02	.07
Dummy—class 3	.04	-.10	.05	.11	-.09	.04
Dummy—class 4	-.07	-.13	-.06	.09	-.04	.08
Dummy—class 5	.03	-.19**	-.11	.03	-.03	.04
Dummy—class 6	-.09	-.10	.02	.10	-.15	.06
Dummy—class 7	-.08	-.02	-.03	.03	.05	.10

Dummy—class 8	-.09	-.15	-.08	.06	.01	.09
Dummy—class 9	.09	-.25**	.04	.12	-.14	.10
Dummy—class 10	.10	-.04	.09	.13	-.03	.04
Dummy—class 11	.11	-.02	.20*	.14	.01	.06
Dummy—class 12	.00	-.07	-.05	.05	-.07	.03
Dummy—class 13	-.04	-.05	-.04	.13	-.06	.11
Dummy—class 14	.02	-.05	.10	.06	-.01	-.12
R^2 adjusted	-.002	.057*	.081**	.017	.028	-.003
F	.98	1.61	1.90	1.18	1.30	.97

Note: COP = Community Oriented Policing Services Office; TP = traditional policing; PSP = problem-solving policing.

* $p \leq .05$. ** $p \leq .01$.

REGRESSION ANALYSIS: OVERALL ATTITUDE CHANGE DURING THE COURSE OF THE STUDY

Table 6 reveals the results of the multiple regression that was used to assess the strength of the formal and informal socialization experiences during the earliest stages of a police recruits' careers in explaining changes in police recruits' attitudes. The six models explained from 26% to 54% of the variance in changes in police recruits' attitudes between Time 1 and Time 4. In each of the models, preadacemy attitudes was the strongest predictor of the overall changes that occurred in police recruits attitudes during the first 16-months of their police careers. Coworker attitudes and shift to which a recruit was assigned were also strong predictors of change in police recruits' attitudes. In particular, police recruits working in police agencies in which coworkers were supportive of community policing were more likely to sustain their support for community policing and their orientation to problem-solving policing during the earliest stages of their police careers. At the same time, police recruits assigned to 2nd and 3rd shifts, in which patrol officers tend to have fewer opportunities and less time to engage in community policing due to workload, were more likely to develop more negative attitudes toward community policing during the earliest stage of their careers. In other words, work groups, based on shift, has a significant impact on shaping police recruits' attitudes. These findings provide support for the hypothesis that organizational environment and culture has a significant impact on shaping police recruits' attitudes during the earliest stages of their police careers.

DISCUSSION AND CONCLUSION

In general, the findings presented reveal that the Phoenix Regional Police Training Academy had a positive impact on shaping police recruits' attitudes related to community policing, problem-solving policing, as well as traditional policing. In addition, the training academy was able to help police recruits improve their problem-solving capabilities. It is important to realize that although the impact of academy training on police recruits' attitudes and skills is significant, the change is small.¹¹

On graduation from the Phoenix Police Training Academy, police recruits proceed to their respective police agencies where they are assigned to a FTO and required to successfully complete the field-training process and then a 1-year probationary period. The field-training phase of the police

TABLE 6. Regression Analysis of Attitude Change During the Course of the Study (From Time 1 to Time 4)

<i>Independent Variable</i>	<i>Dependent Variable (Beta)</i>					
	<i>Change in Support for COP</i>	<i>Change in Orientation to COP</i>	<i>Change in Police-Public Relations</i>	<i>Change in Orientation to PSP</i>	<i>Change in PSP Capability</i>	<i>Change in Support for TP</i>
<i>Individual characteristic</i>						
Age	.05	.09	.02	-.07	-.00	-.07
Education	-.08	.02	.17*	.02	.06	-.07
White/Caucasian	-.20*	-.08	.00	-.05	-.07	.02
Gender	.04	.01	.01	-.07	-.05	-.03
Prior law enforcement experience	.02	.06	.03	.08	-.02	-.02
Prior military experience	-.01	.10	.08	.04	.07	-.03
Baseline level	-.55**	-.62**	-.52**	-.59**	-.75**	-.66**
<i>Organizational environment</i>						
Agency—Phoenix Police Department	-.11	-.06	.04	-.08	.11	-.24
Agency—Suburban Phoenix	.09	.02	.09	.14	.07	-.09
COP rank: Patrol responsibility	.02	-.04	.08	-.01	-.03	.12
COP rank: Organizational arrangements	-.03	.03	.04	.02	.02	.02
COP rank: Citizen participation	.08	-.03	.07	.16	-.13	.06
Coworker support for COP	-.31**	.05*	-.11	-.23**	-.07	.10
Coworker support for TP	-.02	.15**	-.04	.08	-.06	-.40**
2nd shift	-.08	.22**	.05	.07	.07	.09
3rd shift	.05	.21**	.09	.14	-.04	.10
Other shifts	-.01	.01	.09	.04	.03	.13*
<i>Academy classes</i>						
Dummy—class 2	.03	-.08	-.03	-.08	-.07	.03
Dummy—class 3	-.03	-.00	-.13	.01	-.00	-.07

(continued)

TABLE 6. Continued

<i>Independent Variable</i>	<i>Dependent Variable (Beta)</i>					
	<i>Change in Support for COP</i>	<i>Change in Orientation to COP</i>	<i>Change in Police-Public Relations</i>	<i>Change in Orientation to PSP</i>	<i>Change in PSP Capability</i>	<i>Change in Support for TP</i>
Dummy—class 4	-.04	-.09	-.07	.01	-.03	-.09
Dummy—class 5	-.04	-.09	-.03	-.01	-.00	-.05
Dummy—class 6	.03	-.09	.04	.00	-.08	-.07
Dummy—class 7	-.05	.03	-.05	-.01	.03	.00
Dummy—class 8	.00	.07	.03	-.01	.03	.02
Dummy—class 9	.04	-.01	.07	.01	-.02	-.03
Dummy—class 10	.13**	.02	-.02	-.00	-.05	.02
Dummy—class 11	.03	.00	.00	.01	-.06	-.02
Dummy—class 12	-.00	-.07	-.04	-.00	-.07	-.03
Dummy—class 13	-.11	-.06	-.04	-.04	-.08	-.05
Dummy—class 14	-.01	-.044	-.06	-.03	-.10	.02
R^2 adjusted	.284**	.380**	.265**	.320**	.544**	.386**
F	4.06	5.74	3.79	4.63	10.18	5.83

Note: COP = Community Oriented Policing Services Office; TP = traditional policing; PSP = problem-solving policing.

* $p \leq .05$. ** $p \leq .01$.

recruit's career presents the first real opportunity for the recruit to experience the police officer role, engage in actual police work, and experience the environment and culture of the police organization. It also represents an important training opportunity for reinforcing and further developing the gains the training academy had made in shaping recruits' attitudes toward community policing and problem-solving policing. At the same time, however, field training represents an opportunity to negate the gains achieved during academy training. The findings presented here show that the field-training processes and organizational environments of the various police agencies that participated in this study, in general, failed to reinforce the positive impact that the training academy had on police recruits' attitudes toward community policing and problem-solving policing. Instead, the field-training processes and organizational environments had a negative impact on police recruits' attitudes related to community policing and problem-solving policing, as well as on developing police recruits' problem-solving capabilities. The only positive impact that the field-training processes had on police recruits was related to reinforcing their support for traditional policing and perceptions of police-public relations.

The present study not only reveals the direction of change in police recruits' attitudes and beliefs over time but also confirms that preacademy attitudes and skills, organizational environment factors, individual characteristics, and academy class factors help to predict attitude and skill changes. Although there is variation over time as to which independent variables predict the change in police recruits' attitudes, what is most interesting are some of the consistent patterns that emerge in each of the models. For one, the strongest predictor of the changes that occur during academy training is the preacademy attitudes that police recruits possess. This finding confirms Buerger's (1998) assertion that no police recruit comes to basic training without well-developed attitudes and beliefs about the nature of police work. In other words, police recruits are not empty vessels to be filled with new attitudes and beliefs related to policing. Thus, training to change basic attitudes and beliefs, also referred to as "reform" training, faces a very different challenge than does basic skills training because attitudes and beliefs about the nature of policing are relatively stable cognitive states, that although not completely impervious to change, are very difficult to change.

The findings also suggest that police recruits who train together for 16 weeks possibly develop a unique training class culture that influences recruit attitudes. Class culture could be shaped by class sergeant and/or instructor differences from one class to the next; however, this study did not

examine actual training practices per se, and it may be that some instructors give recruits mixed messages that mediated desired training effects. Differences in student composition from one class to another could also produce a dynamic or class effect that promotes or impedes the development of attitudinal and belief systems supportive of community policing, traditional policing, problem-solving policing, and police-public relations. For example, a class may have a number of police recruits with prior law enforcement and/or military experience, a bachelor's degree, older or younger recruits, and recruits from police agencies that ranked high or low on the community policing and problem-solving policing scales. These findings may have important policy implications for the organization and delivery of academy training. In particular, attention needs to be given to understanding and mediating those influences responsible for producing differential outcomes.

Perhaps an even more difficult problem is sustaining whatever academy training gains are made once the police recruit leaves the training academy and begins the process of socialization into the organization and immersion into the real world of police work. Although, there is variation across the models as to which independent variables are predictors of change during field training, there are some consistent patterns. In particular, organizational environment factors, such as shift, coworker attitudes, and whether a police agency requires patrol officers to engage in community policing were significant predictors of the change in police recruits' attitudes. The emergence of shift and coworker attitudes as significant predictor variables provide support for the assumption that there are multiple informal cultures within police organizations, such as those based on shift and/or squad, with differing attitudes and beliefs about police work and police-public interactions. These findings also suggest that once the police recruit leaves the training academy and enters into the field-training process in their respective police agency, organizational environment factors, including the informal culture of a police agency, become more powerful forces in shaping police recruits' attitudes and skills related to community policing, traditional policing, problem-solving policing, and police-public relations, than individual characteristics or preacademy attitudes. In fact, preacademy attitudes disappeared as a significant predictor of attitude change during the field-training process.

Finally, an examination of the strength of the overall socialization experience of police recruits reveals that preacademy attitudes and the informal culture of a police agency can be a more powerful force in shaping the attitudes and beliefs of new officers than formal academy and/or field training.

Academy classes virtually disappeared as predictors of attitude change between Time 1 (preacademy) and Time 4 (end of 1 year), supporting the assumption that the impact of academy training on police recruits diminishes as recruits go to work in their respective police agencies and are exposed to the more powerful influences of the organizational environment and informal occupational culture (Mastrofski & Ritti, 1996).

Based on the findings, it appears that one of the single best opportunities to advance models of policing that encompass community policing and problem-solving policing philosophies and strategies is to expose police recruits to community policing and problem-solving policing concepts, principles, and practices during basic academy training. These findings reveal, however, that a basic-training academy experience, like the Phoenix Regional Police Training Academy, that combines skills and legal training with reform training, is not likely to be sufficient to alter police recruits' basic attitudes and beliefs toward police work. The gains the Phoenix Regional Police Training Academy made in changing the attitudes and beliefs of police recruits, as slight as they might be, require reinforcement as police recruits move to doing police work in their respective police agencies. For instance, it seems unreasonable to expect police recruits to continue their commitment to community policing and problem-solving policing principals and practices if they leave the training academy and return to a police agency that does not require its officers to engage in community policing or problem-solving activities and has few organizational arrangements, programs, or practices in place to support community. In other words, the police agency, through its leadership, organizational arrangements and programs, and informal work groups sets the tone for community policing and problem-solving policing. When leaders are on board and the organization is configured to practice community policing and problem-solving policing, and in fact does, one would expect a greater likelihood that the police recruits they employ would continue to have attitudes and beliefs supportive of community policing and problem-solving policing (Mastrofski & Ritti, 1996).

Because the field-training process takes place immediately after recruits leave the academy, it is the single best place to expose the police recruit to community policing and problem-solving policing practices and strategies; this, in turn, would couple or link police practice with academy reform training. Certainly, the police recruit needs the field-training process to learn how to put the skills acquired in the academy to use on the street, and both FTOs and recruits indicated that field training was an extremely busy

skills-building period; however, it probably makes sense to expand or restructure the field-training process so that there is ample time to train recruits in traditional policing skills, as well as community policing and problem-solving skills. Formalizing community policing and problem-oriented policing training as part of the field-training process (i.e., requiring recruits to engage in problem-solving projects with their FTOs or assigning recruits to a community policing unit for 1 week during the field-training process), but most important, training FTOs to do community policing and problem-oriented policing training is also an important step that could be taken to sustain and expand community policing and problem-solving policing training gains made in the training academy.

Although the findings presented here are important, they are based on a sample of police recruits who attended one police training academy that adopted one model of integrating community policing and problem-solving policing into academy training. In light of the heavy reliance on both academy and in-service training to produce cognitive changes supportive of community policing and problem-solving policing, there needs to be further research conducted to assess the effectiveness of academy and in-service training on shaping police recruits' and veteran officers' attitudes and beliefs.

NOTES

1. McEwen (1997) surveyed 230 training academy directors and 532 law enforcement executives that implemented community policing and served jurisdictions with populations greater than 50,000 residents.

2. No specific courses were added to the academy curriculum to address community policing or problem-oriented policing; rather, community policing philosophies and practices were simply integrated into some of the recruit courses, often at the discretion of the class sergeant. And class sergeants came from the different law enforcement agencies that used the Phoenix Regional Training Academy. Any description of how community policing and problem-oriented policing were actually integrated into academy curriculum would require direct observation, which is beyond the scope of this research.

3. Buerger (1998, p. 34) defines "reform training" as training designed to alter an officer's perception of the world and/or police work. One of the goals of reform training is essentially to mitigate the excesses of a particular attitude toward progressive police reform. In the case of community policing training, the goal is to replace outdated attitudes and beliefs about policing with new attitudes and beliefs about policing that are consistent with community policing and problem-oriented policing philosophies and strategies.

4. A panel design of 446 police recruits from 14 successive academy classes was employed—with repeated measurement on the same respondents—to provide more

statistical control over individual pretest differences and threats of internal validity due to testing effects.

5. Findings based on the scales with reliabilities below .70 should be considered tentative, and estimates based on them may be unstable and difficult to replicate.

6. The panel sample of 446 police recruits from 14 academy classes was selected with the anticipation that recruits would drop out of police work and/or the study. Prior to beginning the study, training academy administrators advised the researcher that approximately 15% of police recruits drop out of basic academy training, and it was anticipated that another 10% of recruits would drop out of police work within the first year on the job. To manage the threat of internal validity due to drop out, an initial sample of more than 400 police recruits were sought at Time 1 and police recruits were contacted via telephone at subsequent posttests (i.e., Time 3 and Time 4) and asked to participate in a follow-up survey and face-to-face interview. On completion of the study, it was found that 114, or 25.6%, of the 446 police recruits dropped out of police work and only 40, or 8.9%, of the recruits dropped out of the study.

7. The representation of Phoenix police recruits was not consistent across the 14 academy classes. Some academy classes were made up of only Phoenix police recruits, others were mixed, and some contained no Phoenix police recruits.

8. The Community Policing Survey measured the executive's views/understanding of community policing and its potential impacts, the organization's experience with community policing, community policing programs and practices the agency has implemented or plans to implement, organizational arrangements/structures that the agency has or plans to have for community policing to occur, patrol officer/deputy responsibilities, authority and responsibility of mid-level field operation managers, ways in which the agency works or plans to work with citizens in the community, and basic organizational information.

9. Police agencies ($n = 4$) that had only one police recruit in the final sample were not surveyed. In the Phoenix Police Department and the Maricopa County Sheriffs Department, physical territory is broken down into precincts or districts to form separate territorial units with separate administrative structures; therefore, precinct/district commanders from these two agencies were asked to complete the Community Policing Survey.

10. One should be cautious in making too much of these changes because they are small and because some of the scales are subject to measurement error (i.e., $\alpha < .70$) because the measures were borrowed from other studies.

11. These findings may also be a reflection of the fact that the basic-training academy is a testing environment, and one of the things that recruits quickly learn in such an environment is "what the right answer is." Given that recruits may have not made a sharp distinction between a test and the survey, the survey results might indicate only the "right answer" based on training academy lessons and rhetoric rather than an actual change in belief or attitude.

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