



Learning strategies of selected urban police related to community policing

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Abstract *The purpose of this case study was to investigate the learning strategies of police officers. Participants were 80 police officers serving in a Midwestern police agency. Of these, 49 were assigned to patrol duties and 31 were assigned to community oriented policing duties. Each participant completed the "Assessing the Learning Strategies of Adults" (ATLAS) instrument. When individual variables were examined in describing learning strategies among police officers, no significant differences were found using both chi-square and a one-way ANOVA. A multivariate discriminant analysis produced a recognizable discriminant function, and three variables met the criteria to be included in the interpretation of the meaning of the discriminant function. Predominately, male police officers prescribed to the learning strategy traits that are desired in community oriented policing. Police officers who ascribed to the learning strategies which are more congruent with traditional policing were slightly younger than the officers who ascribed to the learning strategy appropriate for community policing. Furthermore, more females in this study ascribed to learning strategies more related to traditional policing.*

As we begin the twenty-first century, the policing profession finds itself in the midst of exciting yet complex change. The emergence of community oriented policing is the driving force behind this fundamental change (Danzker *et al.*, 1995; Dietz *et al.*, 1999; Mastrofski, 1988; Mulcrone, 1993; Palmiotto *et al.*, 2000; Paoline III *et al.*, 2000). Community policing represents a departure from police tradition which was largely based on the police reacting to incidents of crime. Community policing centers on an actual shift in philosophical underpinnings which require the police to identify and solve community problems before they lead to serious crime.

Goldstein (1987) asserted that under the axiom of community policing, officers are frequently expected to not only respond to the full range of problems that the public expects the police to handle, including peace keeping, but also to take the initiative to identify whatever community problems beyond those within the widest definition of police functioning that may affect the public's sense of well being. As Trojanowicz (1990, p. 125) observed, "community policing requires a department-wide philosophical commitment to involve average citizens as partners in the process of reducing and controlling the contemporary problems of crime, drugs, fear of crime and neighborhood decay; and in efforts to improve overall quality of life in the community".

The ideas of community policing are relatively simplistic in-so-much that the police take on a role of being more community oriented and the citizens take



on a role of being more involved with assisting the police with information (Kane, 2000; Brand and Birzer, 2001; Eck and Spelman, 1987). Riechers and Roberg (1990) argued that community policing involves problem solving, police community partnerships, and a commitment of resources to meet the needs of the community. Other scholars have echoed a similar theses (e.g. Alpert and Dunham, 1992; Carter and Radelet, 1999; Greene and Mastrofski, 1988; LaGrange, 1998; Peak and Glensor, 1996; Skolnick and Bayley, 1986).

Community policing differs from traditional law enforcement because it allows officers the freedom to expand the scope of their jobs. At the same time it requires police officers to learn a whole host of new skills. Officers in community policing are challenged to become community problem solvers and encouraged to use their time creatively. Furthermore, officers will be required to digest vast amounts of information to recognize the many resources in the community available to solve a problem.

Today's police officer is expected to learn a vast amount of information that centers on community policing. Police academy executives and commanders are left in a perplexing situation regarding the most effective methodologies to utilize in teaching neophyte and veteran police officers the skills necessary for community policing.

Evolving themes

If community oriented policing is the answer to the problems facing the policing profession, then it becomes paramount to identify the most effective teaching-learning transaction methods to accommodate the changes required. To change an organization or a profession requires training and education. Police executives, educators and trainers face a daunting task in carrying out this new philosophy of law enforcement. They will have to make a critical examination of the past methods of doing business and adopt new improved techniques to teach the new skills that accompany community oriented policing.

The strategies that police officers use to learn a new skill or subject increasingly become an important issue. There are a host of scholars who have presented what have been salient themes in learning strategy research. These scholars have consistently found that distinctive groups of learners exist when they are identified by the pattern of learning strategies which they use (e.g. Conti and Kolody, 1998; Lockwood, 1997; Bighorn, 1997; Ungricht, 1997; Strakal, 1994; Moretti, 1994).

The current focus

The theoretical approach of this study combines the broader scholarship of community oriented policing with the current literature giving spotlight and attention on learning strategies. Community policing has been presented in the contemporary literature as constituting a viable method for engaging organizational change within law enforcement. At the same time minimal attention has been given to how this change is facilitated throughout the organization and, more importantly, how learning strategies can be beneficial in facilitating this change.

The emergence of community oriented policing has sparked a corollary interest in the training and education of police officers. This research proposes that if preferences for learning strategies can be identified among police populations, specific teaching methods can be adapted to best foster the new evolving theme of community oriented policing.

Learning strategies

The authors' point to some relevant generalizations made in the literature pertaining to learning strategies. Conti and Kolody (1998) defined learning strategies as those techniques or specialized skills that the learner has developed to use in both formal and informal learning situations. Conti and Fellenz (1991) argued that because of the global nature of learning styles and in light of the failure of learning style research to identify differences that can be used for organizing groups of learners, the concept of learning strategies has emerged.

Learners approach learning endeavors from different perspectives. The manner in which adults learn and conceptualize a new task is quite different from learner to learner. Darkenwald and Merriam (1982) recognized that adults do indeed employ differing methods to learn a new subject or skill, hence, presenting a sharp contrast to the relatively uniform techniques used in the instruction of children. The process of educating children (pedagogy) is for the most part the same throughout the educational system. The paradox here is that traditionally the same process has been held to be the uniform teaching method for adults as well. However, some contemporary authors maintain that adults learn differently when compared to children (Brookfield, 1986; Caffarella, 1993; Courtney, 1989; Cotton, 1995; Knowles, 1990; 1980; Merriam and Caffarella, 1991). Learning strategies research capitalizes on this by investigating those strategies adults use to learn.

Conti and Fellenz (1991) asserted that learning strategies are the techniques and skills an individual utilizes in order to accomplish a learning task. It is of importance to make a distinction between learning strategies and learning styles. Learning styles refer to the inherent ways that people process information. In contrast, learning strategies deal with the way people approach specific learning situations (Conti and Kolody, 1995). For example, one learner may approach learning a new task in a more uniform and structured manner while another learner may search a host of resources in a less structured manner in an effort to identify the best method to undertake the learning endeavor.

Educational and psychological researchers have studied the learning process to identify distinctions between individual learners. They have used a myriad of approaches to measure intelligence, cognitive styles, student achievement, and the use of learning styles research. Current research has placed the spotlight and attention on the strategies that a person utilizes to learn a new skill. Fellenz and Conti (1989) define learning strategies as external behaviors developed overtime by an individual through personal experiences with learning episodes which the learner elects to use in order to accomplish the task.

Police officers use a variety of available resources to learn the skills they need and the problems they solve in their work. Furthermore, police officers have to adapt to numerous unforeseen situations in the field. For example, when police officers investigate an incidence of domestic violence, each situation has its own specific set of circumstances. Each situation may require a number of differing resources and strategies to solve a problem. The example of a domestic violence case, is prototypical to many of the activities police engage in the field.

Police officers most often engage in informal learning throughout their careers. Informal learning is a continuous and complex process for police officers and occurs in very diverse settings. Police officers typically face situations in their jurisdiction which require identifying problems, assessing community needs, identifying potential solutions, evaluating options, and implementing a chosen alternative. Many of these skills are learned informally when the police are in the field and have to make daily decisions tailored to specific situations.

Instrument used in determining learning strategies of urban police officers

The instrument, Assessing the Learning Strategies of Adults (ATLAS) is based on the work of Conti and Kolody (1998) and has been validated in the areas of construct validity, content validity and criterion-related validity. The instrument was developed to identify quickly the learning strategy group to which the respondent belongs. Thus, the ATLAS instrument is designed to place respondents into one of three different learning strategy usage areas: navigators, problem solvers and engagers. The researchers chose the ATLAS instrument based on familiarity with the instrument and knowledge of numerous studies where ATLAS was used which reported robust results.

Conti and Kolody (1998) described the navigators as follows: focused learners who chart a course for learning and follow it. Subgroup one likes to use human resources while subgroup two is more concerned with the organization of the material into meaningful patterns. Navigators focus on the learning process that is external to them by relying heavily on planning and monitoring the learning task, on identifying resources, and the critical use of resources. An instructor who is a navigator would find assessing schedules and deadlines helpful, would outline specific learning objectives, would promptly summarize main points and feedback, and preview instructional goals for subsequent instructional sessions.

Conti and Kolody (1998) described the problem solvers as follows: learners who rely heavily on all the strategies in the area of critical thinking. Subgroup one likes to plan for the best way to proceed with the learning task while subgroup two is more concerned with assuring that they use the most appropriate resources for the learning task. Problem solvers test assumptions, generate alternatives, practice conditional acceptance, as well as adjusting their learning process, use many external aids, and identify many resources. Problem solvers like to use human resources and usually do not do well on multiple-choice tests. The instructor's role with problem solvers would be to provide an environment of practical experimentation, give examples from personal experience, assess learning with open-ended questions and problem-solving activities.

Conti and Kolody (1998) described the engagers as follows: passionate learners who love to learn, learn with feeling, and learn best when actively engaged in a meaningful manner. Subgroup one likes to use human resources while subgroup two favors reflecting upon the results of the learning and planning for the best way to learn. Engagers must have an internal sense of the importance of the learning to them personally before getting involved in learning. Once confident of the value of the learning, engagers like to maintain a focus on the material to be learned. Furthermore, engagers operate out of the affective domain related to learning. The instructor's role would be to provide an atmosphere that creates a relationship between the learner, the task, and the teacher. The instructor would find it helpful to focus on learning rather than evaluation and encourage personal exploration for learning. Group work may be beneficial and would help to create a positive environment.

Methodology

Population and sample

This study was conducted with the cooperation of an urban midwestern police agency. This agency was selected for three primary reasons:

- (1) It is one of the larger police agencies in this geographical area.
- (2) Access to participants was available to administer the ATLAS instrument.
- (3) The agency has a reputation of being a leader in community oriented policing in its respected state.

For purposes of this study, 49 male and female police officers assigned to traditional patrol duties (assigned to a beat responsible for answering 911 calls) were randomly selected, and all 31 male and female police officers assigned to community policing duties (involved in problem solving with community members and not restricted to the 911 system) were selected. The total research sample was 80 police officers or 13 percent of this agency's commissioned officers.

The sample of police officers took the ATLAS which was administered by the researchers. In addition to the learning strategy instrument, basic demographic data were collected.

Research questions

This study specifically addressed the following six research questions:

- (1) What were the learning strategies used by police officers employed by this police agency?
- (2) Was there a difference in learning strategies preference used by police officers in this agency assigned to traditional patrol duties and those assigned to community policing duties?
- (3) Was there a difference between the learning strategies preference used by police officers in this agency who hold college degrees and those who do not?

- (4) Were there differences in the learning strategies preference of police officers in this agency according to race?
- (5) Were years of police experience within the police agency related to learning strategy preferences?
- (6) Were there differences in learning strategies used by police officers in this agency according to their ages?

Results

Data were collected from the 80 police officers who completed the Assessing the Learning Strategies of Adults (ATLAS) instrument. There was a total of 71 (88 percent) male participants and nine (12 percent) female participants. Of the participants, 24 (30 percent) were members of a minority group and the remaining 56 (70 percent) identified themselves as white non-Hispanic. Among the minority officers, 12 (15 percent) were African American, two (3 percent) were Asian American, five (6 percent) were Hispanic, five (6 percent) were other (Native American, Pacific Islander).

After completing the ATLAS, respondents were placed in their specific learning strategy groups (e.g. problem solvers, navigators, and engagers). Overall, 50 percent of the participants were problem solvers, 23.8 percent were navigators and 26.2 percent were engagers.

Recall that the ATLAS is designed to place participants into one of two subgroups within their learning strategy. Of the 40 problem solvers, 50 percent were placed in subgroup one and 50 percent in subgroup two. Of the 19 navigators, 57.8 percent were placed in subgroup one and 42.2 percent were placed in subgroup two. Of the 21 engagers, 52.3 percent were placed in subgroup one and 47.7 percent in subgroup two. Table I depicts the overall learning strategy group placement based on the job assignment of the participant.

Chi square analyses were calculated checking for significant differences in learning strategies between the participants based on job assignment (e.g. traditional patrol and community policing), race of participant and gender. No significant differences were found.

Three separate one-way analyses of variance (ANOVA) were calculated on the learning strategy preference by educational level of the participant, by the age of participants, and by the years of experience of the participants. No significant differences were found. Univariate analyses were not useful in

Learning strategy ATLAS group	Patrol	COP	Total (N)
Problem solvers	20	20	40
Navigators	13	6	19
Engagers	16	5	21
Total	49	31	80

Note: COP = community oriented policing assignment

Table I.
Learning strategies – placement based on job assignment

understanding the relationship between learning strategies used by police officers and variables of age, years of experience, and prior education. What remained was a multivariate procedure which could provide a more complete explanation of the current research.

Discriminant analysis

Discriminant analysis is “a statistical technique which allows the investigation of the differences between two or more groups in relationship to several variables simultaneously” (Klecka, 1980, p. 7). In discriminant analysis, as with other multivariate techniques, the emphasis is upon analyzing the variables together rather than singly. In this way, the interaction of multiple variables can be considered. “Discriminant analysis is useful when known and distinct groups exist” (Conti, 1993, p. 91).

The set of discriminant variables used to explain placement in these groups consisted of age, gender, prior education, job assignment and years of experience. The discriminant function which was used to classify the cases and which can serve as a guide for describing future placement of respondents into these groups was as follows:

$$D = 1.375 (\text{gender}) + 0.204 (\text{age}) - 0.179 (\text{years of experience}) - 1.099 (\text{job assignment/community policing or traditional patrol}) - 0.170 (\text{educational level of participant}) - 5.171 (\text{constant}).$$

Three variables had sufficient coefficients to be included in the interpretation of the meaning of the discriminant function. They were as follows: gender (0.31), job assignment (-0.40), and age (0.36). Since the coefficients for all three variables were similar in value, they carried equal weight in naming the discriminant function. Two of the five variables (experience and education) had low coefficients, therefore they were not used in the interpretation of the meaning of the discriminant function.

Based on the strength of the variables (gender, job assignment and age), the discriminant function was named “Adapting to the new paradigm.” When these variables were examined simultaneously, they appeared to explain the learning strategy group placement of the police officers. As Table II indicates when age and gender move in one direction, job assignment moves in the other direction.

Variable	Problem solvers	Navigators	Engagers
Job			
Patrol	20	13	16
COP	20	6	5
Age	32.25	31.68	34.29
Gender			
Male	38	19	16
Female	2	2	5

Table II.
Variables significant in naming the discriminate function “Adapting to the new paradigm”

Notes: Patrol = traditional patrol duties; COP = community oriented policing duties

For example, those officers who are problem solvers appear to be male with a mean age of 32.25. Furthermore, a greater number of problem solvers were assigned to community oriented policing duties when compared with officers choosing the other two learning strategies preference.

In contrast, those who selected the strategies of engager were the oldest with a mean age 34.29, and 19 percent of engagers were female officers, while 81 percent were male. In viewing the discriminant function “Adapting to the new paradigm” the engagers tended to be assigned to traditional patrol duties (76 percent), and this learning strategy group encompassed the most females (i.e. 19 percent) when compared to those in the problem solver group and the navigator learning strategy group. The navigators were the youngest (mean age 31.68). Further, navigators tended to be more oriented towards the job assignment of traditional patrol and were made up of 11 percent women and 89 percent male.

It is important to note that in this discriminant function, it is not any one variable independently which explains group placement, but it is a constellation of variables. The variables of job assignment, age, and gender taken together were salient in naming the discriminant function and thus enhancing the understanding of learning strategy group placement of police officers in this study.

Discussion

It was determined from the calculation of the chi-square and the one-way ANOVA that individual variables by themselves were not significant in describing learning strategy group placement. On the other hand the use of discriminant analysis proved to be useful in understanding the relationship of learning strategies and placement of police officers in this study. Discriminant analysis allowed the researcher to examine multiple variables simultaneously to see if they could describe learning strategy group placement. Thus, a discriminant function was produced and subsequently named “Adapting to the new paradigm.”

The “Adapting to the New Paradigm” process more fully describes what is taking place within learning strategy group placement. The discriminant analysis revealed that there was a trend towards those officers who were middle to younger in age and predominantly male to fall into the problem solver learning strategy group. The navigators tended to be slightly younger than problem solvers and 11 percent of this group were female police officers. Further, navigators had the highest mean years of job experience (7.11) when compared to the problem solvers and engagers.

The engagers were older than those police officers in the navigator and problem solver groups. The engager group encompassed the largest amount of female representation (19 percent). Further, the engagers were lower in years of job experience (mean 5.87) when compared to the problem solvers and engagers.

Engagers are passionate learners who love to learn with feeling, and who learn best when actively engaged in a meaningful manner. Engagers must have an internal sense of the importance of learning to them personally before getting involved in the learning. Once confident of the value of learning, they like to maintain a focus on the material to be learned. The instructor's role when facilitating the learning process for engagers would be to create a relationship between the learner, the task, and the teacher. Group work also helps to create a positive environment.

Upon applying the engager learning strategy to policing, the discriminant process becomes even clearer. Female police officers may very well desire to perform many of the tasks required under the community oriented policing philosophy. However, before they can do that they may feel they have to be accepted in what has been historically a very male dominated profession.

The evident gender disparity in policing has historically proven problematic for female police officers to forge an identity in the profession. From the entry of the first sworn female into policing in 1910 until 1972, women officers were selected according to a different criterion from men. In many cases they were employed as policewomen and limited to working with women, children and typewriters (Martin, 1989; Milton, 1972). One of the instructor's primary tasks with engagers is to develop a positive relationship with the learner. Thus, if female police officers are trying to prove themselves as worthy to their instructors, supervisors and colleagues, they may focus primarily on acceptance into the police culture.

On the other hand, discriminant analysis indicates that medium aged males tend to gravitate towards the problem solver learning strategies. The problem solvers are learners who rely heavily on all the strategies in the area of critical thinking. These learners may question assumptions, generate alternatives, practice conditional acceptance and may use external aids. In essence, this learning strategy allows for a generous amount of flexibility and experimentation. Hence, these skills and traits are highly desired in community oriented policing.

Male police officers may feel they can perform these tasks and do community policing because they do not face the problematic environment of being accepted into the profession as female police officers do. Female police officers may feel as if they have to prove themselves first by performing the traditional crime fighting (reactive policing) functions.

Within the discriminant function the navigators were the youngest (mean age 31.68). Within this group, 89 percent were male and 11 percent were female, 68 percent were assigned to traditional patrol and 32 percent of the participants were assigned to community oriented policing.

It is helpful to recall that navigators are focused learners who chart a course for learning. They rely heavily on planning and monitoring the learning task. Recall also that the instructor's role when facilitating for navigators would be to schedule assignments and place deadlines. The instructor may also outline

objectives and expectations, summarize main points, give prompt feedback, and prepare the instructional situation for subsequent lessons.

By applying tenants of the navigator learning strategy to policing several conclusions can be drawn. First, the discriminant function revealed that navigators were the youngest when compared to problem solvers and engagers. In general, the younger a police officer is, the less experience he or she possesses. Thus, they will rely more on direction and instruction from a supervisor and may not take the risks that a problem solver would when making a decision. Navigators would most likely follow established police protocol, standard operating procedure, and ask for much direction. Furthermore, they would be comfortable in a behavioral and paramilitary learning environment. Navigators would perform well in this environment because this type of learning environment is very structured and the instructors have total control of knowledge dispensing with very little input on the part of the learner.

The discriminant function indicated that those who use a problem solver learning strategy gravitate toward community oriented policing tasks. For example, 50 percent of the problem solver group were made up of community police officers. This is readily seen when comparing assignment of the problem solver group to the number of community policing officers assigned to the navigator group (23.8 percent) and the engager group (26.2 percent). Thus, those police officers who were navigators and engagers may be adapting their preferred learning strategies to the evolving community oriented policing paradigm, while the problem solvers had a natural inclination or affinity for the paradigm.

Summary and conclusion

The evolving philosophy of community oriented policing is a fundamental change in the way police deliver service to the community. Gutierrez and Thurman (1997) argued that as job descriptions move from reactive styles of policing in the traditional patrol model to proactive styles in the community policing model, thus training and performance become critically important. Of concomitant interest are learning strategies that police officers use to learn a new skill or solve a problem.

Discriminant analysis revealed the variables of age, job assignment and gender were salient in naming the discriminant function. Furthermore, a higher percentage of problem solvers were assigned to community oriented policing duties. It may very well be that when officers are assigned to community policing they have to adjust to many of the tenants found in the problem solver learning strategy due to the very nature of the task required (e.g. solving problems, utilizing resources, critical thinking, working with citizens).

The problem solver learning strategies are very similar to those skills desired in community policing (Conti and Kolody, 1995, 1997). This can be seen in the general community policing literature as it pertains to the evolving traits desired of police officers. Table III exemplifies the similarities between

Problem solver learning strategy	Community oriented policing
Critical thinking	Critical thinking
Generate alternatives	Generate alternatives to solve problems
Identify resources	Identify resources to solve problems within the community
Test assumptions	Test assumptions as they pertain to traditional police response in dealing with community problems
Adjusting learning processes	Adjusting processes to respond to different community problems
Use many external aids	Use many external aids to solve problems within the community
Provide environment of practical experimentation	Experiment with different approaches to solve community problems
Give examples from personal experience	Use personal experience to solve problems
Assess learning by asking open-ended questions	Assess problem solving by open discussion with citizens
Problem solving activities	Problem solving central to community policing
Hands on activities	Hands on activities working with the community
Spontaneity and creativity	Encouragement of innovation and creative problem solving. Encourage creativity and risk taking

Notes: Community oriented policing traits drawn from a synthesis of the literature: Couper and Lobitz (1991); Oliver (1998); Palmiotto (2000); Thurman and McGarrell (1997). Problem solver learning strategy traits drawn from Conti and Kolody (1995, 1997)

Table III.

A comparison between processes identified in the problem solver learning strategy and those skills/traits necessary for community oriented policing

community policing strategies and traits in the problem solver learning strategy. As Table III reveals, the problem solver learning strategy and the skills and traits desired for community oriented policing closely parallel each other. Furthermore, many of the names of the problem solver learning process and the community policing process are the same.

Implications for practice

The researchers propose that authorities responsible for selecting and training police officers will benefit by giving the ATLAS survey, and those who demonstrate learning strategies of the problem solver should be considered for community policing assignments. It may also be beneficial for police executives and trainers to identify the learning strategies of veteran and neophyte police officers so that more appropriate accommodations for teaching and learning can be made in the police training classroom. This might be beneficial in selecting veteran police officers to be mentors to neophytes sharing their learning strategy preference.

If learning strategies among police officers can be identified, it would assuredly place police executives and trainers in an advantageous position

when implementing the changes required under the philosophy of community oriented policing. This may actually assist in facilitating organizational change. Law enforcement executives wishing to change from a traditional model of policing to community oriented policing must overcome many hurdles. Much of the community oriented policing literature has focused on the external (service to the community) change. While this change is important, re-assessing organizational goals and then re-engineering the organization so that community policing can be accomplished also become very important goals. Knowledge of learning strategies within the police organization may assist in this organizational re-engineering.

The challenges inherent to community oriented policing which police organizations must address to meet the security needs of contemporary society are likely to be such that police departments throughout the USA are at the same starting point. These challenges include outdated police training methods and haphazard methods to foster organizational and individual learning. Factors such as these may be critical to any ultimate solution to the challenges of shifting from traditional policing methods to community oriented policing.

Learning is a very complex process involving a number of variables. This study demonstrates the usefulness of using multivariate procedures such as discriminant analysis as opposed to univariate analyses to describe the complex processes of learning in a specific context.

Even though this study was limited to 80 police officers in one urban agency, and as a case study of sorts which cannot be generalized to the larger police population, it points to promising areas of new research. This study not only sheds light on the different learning strategies that police officers use, but it also identified learning strategies that are the most congruent with community oriented policing. Furthermore, this study contributes to existing empirical literature on community policing, so that this new paradigm and the change processes that accompany it can be more fully understood. Because the small study was limited to one municipal police agency, we suggest that future state-level studies be conducted to determine whether the findings of this study can be replicated in other municipal settings.

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