represent the typical setting in which most clinical psychologists practice and when these behavioral treatments appear, they are similar to cognitive treatments (e.g., Cautela, 1967). CBA should accept the challenges and frustrations of working in settings where the clinician has limited or no direct influence on the contingencies outside of the therapy session and that CBA has something to offer that is unique. A number of clinical behavior analysts have developed research agendas studying the application of a behavior analytic theoretical interpretation to the treatment of the problems of high functioning, verbal adults. For example, several publications over the last decade have addressed issues relevant to outpatient clinical settings (e.g., Dougher, 1993; 1994; Follette, Naugle & Callaghan, 1996; Hayes, Jacobson, Follette & Dougher, 1994) and have developed interventions from a perspective which is consistent with the underpinnings of behavior analysis (e.g., Hayes, Strosahl, & Wilson, 1999; Kohlenberg & Tsai, 1991). These efforts move us forward to involve CBA in clinical contexts where attending to and modifying verbal behavior is key to effective clinical intervention.

It is important to the future of clinical behavior analysis to continue to seek grants to research the effectiveness of these interventions and to refine the related theoretical conceptualizations. As we enter the 21st century, these are exciting, yet challenging times for clinical behaviorists. I urge us to form alliances between our academic and community-based clinicians and to enter into dialogues with our non-behavioral colleagues. Given our sturdy foundation in behavior analysis, with its successes in many clinical areas, as we continue to branch out, we have much to offer the field of clinical psychology and a wider range of people in need of assistance.

References


What Does Organizational Behavior Management Have to Offer Social Service Organizations? An OBM Primer for ABA’ers
By Joseph Cautilli, M.Ed., M.Ed., CBA & Karen Clarke, RN

The credentialing of behavior analysts has launched a new group of professionals into the work force. As the behavior analytic profession grows and the number of workers in the area continues to multiply, more behavior analysts will form their own companies or enter into other companies and move up the corporate ladder. As we do so, we will bring our unique way of conceptualizing problems into the social service industry. Thus it becomes important to know how our science, commonly called Organizational Behavior Management (OBM), conceptualizes and empirically solves organizational problems. This article aims to introduce readers to some of the basic concepts and empirical data that OBM has to offer.

OBM answers questions at the organizational level of analysis. Some questions that will be critical for certified behavior analysts with management responsibilities are: a) How do we attract workers during this time of a worker shortage? b) How do we organize what workers do? c) How do we assess and become responsive to various stakeholders? d) How do we go about building successful partnerships with other agencies? e) How can we consult to other social service and mental

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OBM Primer
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making them more efficient, improving quality, and increasing worker satisfaction?

Additional concerns needing attention include: a) With top executives within our industry is moving further and further from the actual level of intervention with our clients, how do we ensure training is in touch with the contingencies of the workers? b) How do we set objectives which allow measurement of worker performance? c) How do we create flexible organizations so that our workers can advance and we can learn from them? d) How do we help agencies to manage employees from different cultures and with different values? e) Given tight budgets, how should companies decide where to allocate resources such as time, money, and personnel? All of the above are considered management questions. I begin by exploring the way behavior analysts reconceptualize management.

Management

Management is the acquisition and use of resources. Behavior analysis presents unique ways to manage human resources. OBM redefines management from control of the person to control of the context/environment in which the person works. It has developed powerful techniques for a range of management areas. This article will address these concerns under the following headings: a) Job analysis and design; b) Interviewing and hiring potential employees; c) Setting performance goals; d) Retention of employees; e) Merit pay and other reward systems; f) Creating flexible organizational structures; g) Performing functional analyses; and h) Training and managing diversity. You will notice two common themes throughout these areas: making feedback bi-directional and transforming managers into good coaches.

Job Analysis and Design

Task and goal analyses are critical to the design of any job. When writing a job description, one needs to pinpoint the tasks essential for the position. Just as with clinical patients, you must break down the content of the job into discrete behavioral steps. The question in task analysis is: What must be known in order to perform the task?

When one is not at the point of being able to identify clear tasks, goal analysis is more appropriate. In goal analysis, one begins with the more general goals of the position. In OBM, this is referred to as “management by objectives.” Here, the position’s goals are seen as the “tasks” of the employee. For example, a goal may be “a good supervisor.” So, one would begin to explore which behaviors are critical for good supervisors. The question in this analysis is: What tasks will achieve the goal? Once a goal analysis is completed, one is now ready to do a task analysis for each of the clarified goals/objectives.

Of course the above represents an oversimplification of the process. There is a large body of research on this topic; the crucial aspect is the validity of your task or goal analysis. Often the way a manager thinks a job is accomplished, is not what happens in actuality. Luthans and Lockwood (1984) looked at the behavior of managers that received the quickest promotions and compared it to managers that were considered most effective at their job. They found that managers that were considered most effective spent a significant portion of their time managing human resources, such as removing obstacles to employees performing their job, encouraging communication, managing the context with reward and, disciplinary systems. Managers who were promoted quickest were those that spent the largest portion of their time politicking and engaged in self promotion. As behavior analysts, we need to ensure that we promote effective managers, not good politicians. In some situations, it takes very sophisticated techniques to conduct such an analysis. For those interested, a good place to start reading on this topic is Crowell & Anderson (1983).

Once a task or a goal analysis is done, the managing behavior analyst still needs to look at the position and see if the position is sufficiently appealing: do sufficient reinforcers exist to maintain workers in that position? Failure
to find sufficient reinforcers could lead to high worker turnover. For example, one of the failures of the early scientific management movement was its approach to job analysis. This movement placed a strong emphasis on efficiency to exclusion of motivational aspects. The result was that workers often became bored with their jobs and quit (Griffin, 1982). Employee turnover costs a company about 50-60% of the employees total compensation package/turn over (Agno, 1998). For example, in managing behavioral technicians, a manager should consider that just conducting discrete trial procedures is not varied enough for most employees. Thus job descriptions are considered fundamental to the retention of employees.

Job descriptions are also important for development and validation of hiring procedures. Barrett (1996) suggested that job descriptions should be simple, but at the same time contain enough detail that the reader can understand what is done on the job. To do this one must highlight the major job duties. Once this has occurred, we say that the description has content validity.

After job descriptions have been created, it is critical that administrators do not violate the description. To do so is to violate the trust between management and employees. Trust that management will have correspondence between what they say and what they do it critical to management-employee relations (Edwards, 1979).

Interviewing and Hiring Potential Employees
Knowledge, skill, and abilities necessary to performing the advertised position should be defined in clear behavioral terms. This is accomplished by performing a task analysis of the position (as discussed above). It is then important to develop behavioral interviews to determine if the candidate’s skills level is likely to match the requirements of the task steps (given training). Questions in a behavioral interview emphasize a focus on the candidate’s actual past experience in dealing with similar situations rather than abstract questions on how a person would handle a hypothetical scenario.

After assessing the candidate’s skill level, interviews must explain the company’s expectations or objectives for the job position. This will allow employees to have an honest view of the company and will factor in their decision to take the job; this, in turn, may reduce turnover rates. Finally, it is important to note the candidate’s knowledge about the company. Did they ask questions relevant to the organization’s culture and overall goals?

Setting Performance Goals
In addition to analyzing the job, performance goals need to be set for the position. Probably the best established finding of studies on goal setting is that workers will perform at a higher level when given a specific goal than when simply asked to do your best (Locke, Shaw, Saari, & Latham, 1981; Locke & Latham, 1984). In addition, evaluative feedback on, goals and rewarding of successful goal completion is critical (Alvosius & Sultzer-Azaroff, 1990; Methot, Williams, Cummings, &Bradshaw, 1996; Richman, Riordan, Reiss, Pyles, & Baily, 1988). While the use of rewards has unfortunately been somewhat controversial (see Kohn, 1996; Lepper, Kevney, & Drake, 1996), critical analysis of the research and studies on this topic demonstrate that in properly designed programs rewards increase creativity, performance, quality and intrinsic motivation (Cameron & Peirce, 1994; Cameron & Peirce, 1996; Dickinson, 1989; Eisenberger & Cameron, 1996; Lorenzi, 1988; LaFleur & Hyten, 1995). In short, simple rewards such as smiles, praise, or taking the time to ask yourself if there is an employee that you can tell what a good job they did, can “bring out the best” in people (Daniels, 1994).

A particular example of this principle was demonstrated in research conducted at Park Mills, Inc. Before the goal setting program began, employees’ average attendance rate was 86%. As part of the goal setting program, they agreed to raise their average attendance rate to 93%. Each day the attendance

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was charted so that workers could be kept informed as to their progress toward their goal. Within four weeks the goal was achieved and surpassed (94.3%). Unfortunately the study was only continued for nine weeks so that maintenance remained a question. One study demonstrating long term beneficial effects is Latham and Locke (1979). Loggers were given truck loading goals. In this study 94% of the loggers were achieving higher loading rates from their baseline seven years later.

Retention of Employees
Aghno (1998) has stated that several factors contribute to employee turnover. Factors identified were: a) improper recruitment, b) the nature of the job and the company, and c) the characteristics of the individual employee. While these three broad areas do contribute to employee turnover, when there is a problem retaining employees, an OBM approach would direct companies to perform a functional analysis of employee turnover in order to determine why people are leaving in this specific situation (steps in conducting a functional analysis are discussed below). Through this assessment, answers can be found that may help to either redesign the job, provide incentives, or other interventions that may prevent leaving. In addition, as Agno (1998) points out, retention should be a goal from the outset: from the time of designing the job description and conducting the interviews.

Merit Pay and Other Reward Systems
While classical management theory tended to overemphasize the role of money in satisfaction (Wall Street Journal, 1987) and humanistic theories of human behavior tend to believe that only a survival level wage is important (and that reward may decrease motivation), performance-based wage bonuses have been shown to provide an excellent reward structure for employees and have been shown to increase motivation toward target behaviors even in the Soviet Union.

However, merit pay structures have not worked in every case. Merit pay is best viewed as one set of contingencies that factor into job performance. Other contingencies that might factor in are things like social reinforcers and the opportunity for advancement and professional development. Sadly however, in most organizations pay is not contingent on the performance of critical behaviors and maybe this is something that behavior analysts can help change.

Creating Flexible Organizational Structures
As the functional science of behavior analysis moves into organizational creation, we will need to decide how a focus on function can create flexible organizational structures. Will our companies be hierarchical or work in teams (e.g., will contingencies be placed on individual performance or group performance)? Contrary to current trends, most successful companies have some degree of hierarchy.

Part of a manager’s role is to stand tall in turbulent change and enlist the participation of colleagues to realize the organization’s vision. In general, a manager’s job is often chaotic and unpredictable. Thus far, no pat formula exists that takes into account all of the variables involved in being a successful manager. One study looking at management found that much of what managers do is put out the multitude of brush fires that occur every day in the work place. They appear to be interrupted all day long. Often they have no time for setting up control systems. It is a myth that they make decisions on plentiful and precise knowledge. Managers must focus on scarce human resources and have flexible yet sound methods for responding to the demands of the work environment.

In a book titled, Why Nothing Works, Marvin Harris looked at the ecology of industrial systems in American. He found environmental factors which selected for the exact opposite of quality. In the area of management, looking at systemic factors that select against quality is at the heart of what has come to be known as Total Quality Management or TQM. TQM is based on achieving quality through analysis of and control of variation in systems. This process is referred to
as “statistical process control.” The idea of statistical process control is to look at normal variation within the system and make decisions which take into account that variation. For example, a baseball team loses three games in a row, so the owners fire the skipper. Then the team wins its next two. It’s easy to assume that they won because of the new manager. Perhaps the team was feeling anxious because management had shifted. Or, perhaps this was purely an incidence of statistical regression to the mean. No team loses every game. It’s expensive to fire and hire employees.

Statistics regression to the mean is a very real phenomena and has to be taken into account in organizational decisions (see Han-tula, 1995; Hopkins, 1995; Pfadt & Wheeler, 1995 for excellent ways that this can be done). Unfortunately, many managers will draw the conclusion that praise does not work and stop praising their employees and create rules common to “management by exception.” Another example of statistical regression is the case of a manager who praises an employee for outstanding work (when the work was much better than average). After the praise if the manager looks at the next instance of performance, she might wrongly conclude that the praise was ineffective due to statistical regression to the mean. Is this because the praise did not work? No, praise like any form of reinforcement is a change factor over time; it is probabilistic. Regression occurs because a host of factors were required to go into this particular performance product, and any one of those factors might change for the next performance and probably will. Mawhinney (1987, 1992a, 1992b) worked on an integration of OBM and TQM. This integration can be used to achieve a system that results in high-powered achievement and decreased random aversives for employees. The integrated TQM and OBM view tries to: (1) discover and utilize employees’ wide range of knowledge, skills, and abilities; (2) observe the different kinds of skills needed by different managers; (3) answer the question: What makes an effective manager? (4) create, change, and implement corporate policies and procedures that enhance organizational members’ ability to function in teams; and (5) understand technical skills needed for employees to function, especially at lower levels.

In answering the above questions, the issue of the overall structure of an organization arises. One of the most common structures in organizations includes a middle management level. These managers often manage supervisors. They tend to worry about staffing for all lower level management functions and develop a culture-an environment where those levels can function in a way that people can work together. Middle management does less strategic planning than upper level management. As companies have moved away from hierarchies toward what is called “flat companies,” middle management is becoming an extinct species. Companies are letting go of middle managers by putting more trust on the shoulders of the employees.

One way in which middle management has tried to survive die off has been to develop a host of informal roles such as idea generators, seeing opportunities for growth, innovation, and expansion and becoming the technological gate keepers and problem-solvers. Middle managers work in the system and are concerned with the nuts and bolts of solving problems.

Another level of organizational structure that certified behavior analysts might aim for is senior level management. Senior managers chart the long range course of the organization. Their job is to work at the system level of analysis. They are often considered the leaders of the organization and provide opportunities to lower level management workers to expand into new areas. They define the new paths which the organization will pursue. They develop abilities and the skills of the workers below them. They are expected to provide a vision and to empower, coach, and guide the people who work under them.

**Creating Organizational Rules**

As changes occur in the health market, so do management practices. To be managers, we need
to be rule driven. The most common rules include customer satisfaction and designing contingencies to reduce the statistical variation in daily performance. But foremost is maintaining focus on the minute-to-minute matters of each day. In this worker shortage environment, it involves understanding the needs of the current workforce. Surveys suggest that today's 18 to 35 year-old group wants challenges and jobs that provide for professional development. Designing or redesigning jobs to provide challenges and development will cut down on employee turnover.

Vision, policy and procedure are often discussed and agreed on in strategic planning meetings. From these meetings often emerge the rules that will guide the company into the future. Strategic planning is a combination of knowing the market, as well as the knowledge, skills and ability of the staff. In addition on needs to use past relevant events to predict future relevant events. This often calls for a process to prioritize events. Look to the community to see what behaviors are currently being selected.

The above process is fraught with problems. For example, the process could go astray because a company banking on the marketability of a new technology might underestimate the possibility of advances in existing technology. So here again managers must often work with less than perfect information.

A Functional Analysis of Performance Problems
As with any performance problem, behavioral management strategies suggest the performance of a careful functional analysis (Skinner, 1953; Luthans, 1980). This process is probably well known by most behavior analysts reading this paper but the focus here is on applications for management problems. How does one go about conducting a functional analysis with a problem solving focus? A functional analysis has five major steps: (1) identifying critical behaviors to be addressed; (2) measurement of the behavior; (3) the functional analysis itself (identifying the antecedents and consequences); (4) the development of an intervention strategy; and (5) evaluation to ensure that performance improvement is occurring (Luthans, 1980).

The first step is to conduct a behavioral audit (Luthans & Martinko, 1976). The audit would use either internal staff specialists such as a human resource manager or it would use outside consultants. Such an audit should systematically analyze each job in question using job analysis techniques commonly employed in personnel administration. The advantage of this approach can be realized by the audit. In addition, the advantages of staff expertise and consistency can be gained (Luthans, 1980). In this stage we would look to see if the behavior that we are looking for can be measured and if it has a direct impact on performance outcome (Mager & Pipe, 1984). The question to be asked here is: Is the change in behavior performance large enough to make a difference in outcome?

In the second phase, we measure and record the behavior in question in the performance issue. A baseline frequency would be obtained. This frequency should be compared to expected frequencies. Sometimes in this part of the analysis we realize that the problem is not as big as we thought or that it is bigger than we believed.

In the third phase, we conduct a functional analysis of the problem behavior. This is we look at the antecedents and consequences of performance. Mager and Pipe’s (1984) book on analyzing performance problems contains a flow diagram that is excellent for ensuring that all factors are considered in a functional analysis. A good functional analysis pinpoints the context of the problem and leads to direct solutions for organizational behavior modification.

In step four, we would develop an intervention strategy based on the function of the performance deficit. For example, if the reason an employee is missing a lot of work is that they found the job boring (lack of reinforcers), then we could apply restructuring techniques to build more reinforcers into the position. If we discovered that employees’ at-
tendance declined after a new manager came on and employees reported interactions with him as extremely aversive, we could restructure the workplace so that the employees would be more assertive and teach the manager to use positive reinforcement with those around him (Daniels, 1994).

In step five, we evaluate to see if we are having the desired effect. If we are not, then a change in the strategy is needed. Perhaps even with instruction, the manager can not stop saying mean things. At this point we may want to try a direct scripting approach with the manager and be sure to include positive reinforcement for the desired changes in the manager’s behavior.

**Training and Managing Diversity**

While a performance deficit should not automatically be assumed to be a training issue (Mager & Pipe, 1984), some portion are. The critical point is a thorough assessment of the situation. Mager and Pipe (1984) present a detailed flow chart that should be used in assessing performance problems. Such an analysis may reveal that a problem is a skills deficit or it may reveal that a problem is really a motivational deficit. While a motivational deficit may be better addressed through other techniques such as removal of obstacles or aversive interference with performance or to apply some positive consequences for completion, a skills deficit would warrant some type of formal training program.

The key to designing a training is to perform a task and goal analysis of the real world job (Tiemann & Markle, 1990). To perform such an analysis, one must see each real world job as an observable situation in which you can poke about, watch what they do, how often they do it and, if the task is simple enough, a good instructor may even try the task themselves. These factors are discussed above in the section on job interviews.

A trainer planning instruction for a relatively specific job can concentrate upon the component tasks of that particular job. However, there are reasons why educators may plan their curriculum in a different way. First, identifying the component tasks of all jobs would be impractical (Tiemann & Markle, 1990; Bellamy, Horner, & Inman, 1979). Second, the trainer must prepare students for aspects of their future job, such as productivity in the organization’s culture or ethical responses. For these particular sequences a goal analysis would be a better strategy.

At Devereux, our foster care’s Teaching Families Program is an excellent example of using both task and goal analysis strategies. The program was designed by Barry McCurdy, Ph.D., a behavioral psychologist with many years experience in designing curriculum. The curriculum is in modular form and pre-post analyses are performed. The Teaching Family home program uses task-analyzed skills such as using praise and feedback, and trains these skills. The training of these skills incorporates instruction, role-play, modeling, feedback, and rewards such as certificates of completion.

An example of a subject matter that would use a goal analysis predominantly, and a task analysis as a secondary way of instructing, would be leadership training (Fleming, 1992). Leadership training is critical to an organization’s ability to survive (Mawhinney, 1992b). Leaders need to give special attention to the autonomy and feedback characteristics of their employees’ jobs. Autonomy involves empowering their subordinates to make decisions and solve their own problems. In other words, giving employees more control over their own jobs. Feedback can be built into some jobs and leaders need to be taught how to do this in job design. In addition, leaders also must provide specific, immediate performance feedback to their employees. Managers should also build in a “feed forward system” (Kreitner, 1982) so that employees can make contributions to managers as well. From an OBM perspective it is important to teach the basic learning skills such as operant conditioning techniques such as reinforcer preference surveys and functional analysis to managers. Managers can be taught to use nonfinancial re-
wards such as feedback systems and contingent recognition / attention.

One final area of training is to train managers to appreciate and communicate effectively with employees from various cultures. The common trend is to think of culture as differences between people. Culture is much more than just differences, however. People who share a particular culture or a related culture, adopt similar ideas and values for interpreting events. Although membership in a specific cultural group does not determine behavior, members are exposed to, (i.e., socialized by), the same set of expectations and consequences for acting in a particular way. As a result, certain types of behavior becomes more probable (Banks, 1994; Skinner, 1974). It is also important to remember that each worker in an agency is simultaneously a member of multiple groups according to race, ethnicity, religion, class, gender, sexuality, and disability. The literature suggests lack of appreciation of different cultures can lessen worker self-esteem (Kehoe, 1982).

**Communication issues in management**

Communication is an interpersonal process, that involves the exchange of behavior between two or more individuals (Ivancevich & Matteson, 1987). Several topics often fall under the heading of communication: (1) How are conflicts resolved and dealt with? (2) How is the chain of command structured to ensure that instructions and commands flow down and through the chain of command? (3) How are reports, inquiries, and requests handled and move up the chain of command? (4) How do subgroups communicate (i.e., do they communicate directly or does information need to flow up the chain of command to a juncture point, where the subgroups share the same supervisor)? (5) Does the staff have free reign to collect and disseminate nonauthoritative information in their role as an extension of the company? (5) Does feedback reach those it should?

Improving the lines of communication is often seen as a critical role for managing human resources. If the reasons for poor communication are either a skills deficit or a minor motivational deficit, then team building activities, which are designed to open communication and build trust could address this problem. Such activities would include defining conflicts, establishing cooperative work goals and ground rules, negotiating areas of responsibility, generating more appropriate responses to each other, and designing group responses to problems.

The above interventions will only work if a serious motivational deficit does not exist because they rely on all players entering into a collaborative set. If this is not the case or other patterns of communication are so well rehearsed that they are automatic, then efforts are sure to be sabotaged. If the latter is the case, then a functional analysis of each communicator needs to be completed to decide on how to proceed.

**Implications for Graduate Training Programs in ABA**

As might be guessed from the tone of this article, I strongly believe that all students of behavior analysis should take some OBM coursework. This is largely because they will all consult to at least one company, the one they work for, or manage. To train our students in OBM allows them to have the opportunity to change the face of the current social service and behavioral health markets and create an environment for continuous quality improvement.

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