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**THE ACCEPTABILITY OF
BEHAVIOR MODIFICATION IN BUSINESS**

Amy L. Truitt

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Approved by:

Kathy Cimini

Prof. Kathy Cimini

Howard C. Berthold

Dr. Howard C. Berthold

Edward C. Henninger

Prof. Ed Henninger

Gene D. Sprechini

Dr. Gene Sprechini

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The Acceptability of Behavior Modification
in Business

Amy Lynn Truitt

Lycoming College

Abstract

The acceptability of behavior modification was assessed by providing 49 Conrail employees with packets each containing 2 of 4 vignettes, 1 written in organizational behavior modification terminology and 1 written in humanistic terminology. Using a modified version of the Treatment Evaluation Inventory developed by Kazdin (1980a) and the Semantic Differential scale (Osgood, Suci, & Tannenbaum, 1957), subjects rated the acceptability of the vignettes. It was hypothesized that organizational behavior modification terminology would be rated significantly less acceptable than humanistic terminology, and that there will be a significant difference between the ratings of workers and management level employees, with workers rating OBM less acceptable than management. The results refute the hypothesis; organizational behavior modification terminology was rated significantly more acceptable than humanistic terminology ($p < .10$). These results contradict much of the earlier research which found that humanistic terminology was significantly more acceptable than behavior modification terminology. However, the results comparing acceptability for workers and management level employees supported the hypothesis.

The Acceptability of Behavior Modification in Business

As a result of more sophisticated machinery, such as computers and telecommunications, businesses have become increasingly more complex and competitive. Because of this increase in sophistication, today's businesses need to remain competitive in all aspects in order to keep up with other organizations. Companies and their employees need to develop increased skills to cope with the growing scope of business. For managers, this means extensive training for themselves and their employees. They need to develop their employees into the best, most efficient workers possible. Managers need to become more effective, meaning they need to rely on effective methods of influencing employee's behaviors.

Behavior Modification is Effective in General

Behavior modification is the systematic manipulation of contingencies. These therapeutic interventions use rewards and punishments to increase desirable behaviors and decrease undesirable behaviors (Sherman, 1990). Behavior modification in general has applications both in and out of mental health settings. Kazdin (1978) claims that "treatment programs based on principles of operant conditioning have been extended to almost every type of treatment, educational, and health care facility from preschools to nursing homes, as well as to client populations ranging from psychiatric patients to the mentally

retarded" (p. x) (Sherman, 1990).

Research has shown that behavior modification is an effective method of behavioral control. For example, Fee, Matson, and Manikam (1990) conducted a study with preschoolers who frequently displayed behavior that interrupted class (talking out of turn, out of seat, and total disruptive behavior). After training, the teachers in the experimental group began using a nonexclusionary time-out package, while the control group did not receive active treatment for their disruptive behavior. The teachers conducted class as usual. Results showed a significant decrease in disruptive behaviors for the nonexclusionary time-out group; however, there were no significant changes for the control group. These dramatic improvements were found on all assessments used. Numerous text books describe hundreds of other successful demonstrations of the effectiveness of behavioral techniques (Steers & Porter, 1987).

Behavior Modification is Effective in Business

The application of behavioral principles and methods (behavior modification) to the study and control of individual or group behavior within organizational settings is referred to as organizational behavior modification, or OBM (Frederiksen & Lovett, 1980, as cited in Martin & Pear, 1992). Psychologists and business men and women work together to explain, predict, and influence employees' behaviors. These programs are typically

used to address such issues such as absenteeism, product quality and quantity, and employee health and safety. It is fruitful to combine knowledge from the areas of Business and Psychology since both seek ways to modify behavior and also because behavior modification works in the business setting just as it works in settings such as mental health institutions, schools, and prisons where BMOD is used more often. Some of the popular interventions utilize praise and reward.

Penn & Bootzin (1990) found organizational behavior modification to be effective when applied to shift workers. The subjects were not completing the work assigned to them before the following shift arrived. This cycle continued throughout each days' shifts and at the end of the day, there was a lot of unfinished work. A program was implemented where work breaks and sensory stimulation were awarded to shift workers for completing their work before the next shift reported. After implementation, the workers were not only completing their work, but also finishing early and beginning the next shifts work.

Raise the Acceptability Issue

If behavior modification is an effective method, why then isn't business utilizing it more as a resource? Numerous people have noted a reluctance to use behavioral techniques despite its proven effectiveness. This has spawned considerable research in what has come to be called the "acceptability" of behavior modification. Table 1 summarizes some of this research. The

table demonstrates that while considerable research on the acceptability of behavioral techniques has been done in mental health and educational settings, very little has been done in the business settings. The table contains all of the studies listed in Elliotts' 1988 table and several other additional studies added due to a similarity to the current study.

Research on Acceptability in All Settings

The research that has been done on OBM has shown that the acceptability of its interventions is fairly low; however, it is viewed more positively in certain circumstances.

Miltenberger, Lennox, and Erfanian (1989) conducted a study rating four behavior modification techniques using the Treatment Evaluation Inventory (TEI). The results showed that Differential Reinforcement of the other behavior (DRO) was rated most acceptable; this was followed by time-out, overcorrection, and contingent shock. The results from this study imply that techniques that are less restrictive and have no or few side effects are more acceptable, and also, that all techniques are more acceptable when used in extreme circumstances.

It is a common belief that the language and terminology of BMOD as well as its title have a lot to do with its negative reputation and the reluctance on the part of professionals to utilize its interventions. The use of BMOD began with animals in laboratories. It proved to be effective with animals and has been found to work with humans, but the cold sounding

terminology ("control", "engineered settings", "contingency management", "schedules of reinforcement") does not fare well when being compared with terminology used with other forms of intervention that have a much kinder tone (client based therapy, interpersonal communication, organizational leadership, etc.). Woolfolk, Woolfolk, and Wilson (1977) conducted a study with 144 college juniors having very little psychology background, and 50 education graduate students. He showed them a 10 minute film that demonstrated the use of a token economy in a special education classroom. Half of the viewers were told that the tape reflected principles of behavior modification and the other half was told that it represented humanistic and affective education. Using Likert type items from the Semantic Differential scale it was found that the students who were told that the video represented humanist/affective education gave the teacher more favorable ratings. In addition, the teaching method was said to promote more academic learning and emotional growth.

Barling and Wainstein (1979) extended the research of Woolfolk et. al. (1977) and maintained that a significant labeling bias exists against behavior modification in educational settings since the identical videotape was rated more acceptable when described in humanistic terms rather than with behavior modification terminology. Barling and Wainstein also suggested that their results were influenced by prior attitudes toward behavior modification.

Kazdin and Cole (1981) found similar results when comparing the acceptance of BMOD vignettes with humanistic and neutral vignettes. Subjects read and rated each type of vignette on the Teacher Classroom Evaluation scale and the Semantic Differential scale. Results showed that the BMOD vignettes were viewed significantly more negatively than the humanistic and neutral vignettes. The experimenters went a step further and constructed new vignettes utilizing BMOD terminology and others using ordinary terminology; still the BMOD vignettes were rated significantly more negatively. This suggests that it may, in fact, be the terminology that influences people.

Acceptability of Organizational Behavior Modification

The acceptability of an interventions approach is very important to its use and to the image of the field or organization that utilizes it. Generally, the image of a business is affected by its appearance to both its employees and the public. Because the image an employee holds affects their level of job satisfaction, therefore affecting such things as production, loyalty, and absenteeism, and the image the public holds affects sales and loyalty, it is important that business take an acceptable approach. Aside from remaining competitive, pleasing these two groups of people is what allows a company to remain viable. For this reason, it is very important to the business field that organizational behavior modification be the topic of more research. Davis, Rawana, and Capponi (1989)

studied the acceptability of BMOD in staff management. Results showed that instruction was the most acceptable method, followed, in order, by modeling, self management, reinforcement and punishment.

Several students at Lycoming College and Bucknell University have added to the scarce collection of studies based on the acceptability of BMOD in business (OBM). Debbie Cardinale (cited in Berhold, 1982) administered a questionnaire to 15 managers and 15 workers who worked in a large fabric dying plant. The questionnaire contained 22 words to be rated on a 7 point scale, ranging from extremely positive to extremely negative. The instructions read, "Rate the following words on the basis of your initial reactions and perceptions of what they mean to you. Base your decisions with respect to on-the-job behavior." Half of the terms on the questionnaire were taken from a behaviorally oriented text and the other 11 from a traditional management text. The words were listed in random order. Results showed that traditionally based words were rated very positively and behavioral terms fell in a neutral zone.

Lynn Gramley (1992), another Lycoming College student, continued to probe the work force by following the research of Kazdin and Cole (1981). Her study focused on acceptability of OBM through a comparison of vignettes written in OBM terminology and humanistic terminology. Her subjects were 19 business workers, 33 business students, and 27 psychology students. Packets including two arbitrarily ordered vignettes (one in

humanistic terminology and one in OBM terminology), a copy of the TEI, and a copy of the Semantic Differential scale were assembled. At the experimental sights the packets were distributed to the subjects. Subjects were then instructed to read the vignettes and fill out the scales as honestly as possible. The results showed that humanistic vignettes were rated significantly more acceptable overall than were the OBM vignettes ($p < .10$).

Berthold (1983) conducted an experiment where he asked his subjects to indicate whether they believed each of 12 principles with ethical undertones to be true or false. The principles were obtained from a chapter that he had written which described misconceptions about behavior modification and ethical practices and were all false according to Berthold (Berthold, 1982). In addition, Berthold asked the subjects to indicate whether their position was upper level, middle level, or lower level. No one checked lower level and some people, such as clergy, did not check a level. There were 38 subjects who did, and there were approximately equal numbers in both the middle level and the upper level. Results showed that the middle level people felt 38% of the time behavioral programs involved practices not considered ethical or correct. In contrast, upper level people only rated 8% of the statements to be true; therefore, indicating they believe only 8% of the time unethical practices are carried out. In conclusion, if Bertholds' false statements are viewed as ethical principles,

then upper level people find BMOD to be more acceptable than middle level people.

The current study builds on this research by focusing on rating of the acceptability of OBM in an industrial setting, using 49 Conrail employees. Following the research of Kazdin and Cole (1981), Gramley (1993), and Berthold (1983) the present study rated the acceptability of OBM through a comparison of vignettes written in Humanistic terminology and OBM terminology. It was hypothesized that vignettes written in OBM terminology would be rated significantly less acceptable than vignettes written in humanistic terminology. It was also hypothesized that upper level management (third level) would rate OBM more acceptable than first level management and workers, respectively.

Method

Participants

Forty-seven, of 49 selected, Conrail employees from Pittsburgh PA volunteered to participate in this study, 2 withdrew. The subjects included 16 from first level management, 4 from third level management, and 27 workers.

Apparatus

Following Miltenberger, et al. (1989), Kazdin and Cole (1981), and Davis, et al. (1989), the current experiment was conducted using the Semantic Differential scale with its three subscales (Evaluative, Potency, and Activity) (Osgood, Suci, and Tannenbaum, 1957) and the Treatment Evaluation Inventory which consists of 16 items in a Likert-type format on a 1-7

point scale. The TEI was developed by Kazdin (1980a) and was chosen for this study because of its extensive use in acceptability research and the fact that it has been analyzed and tested for reliability and validity (Kazdin, 1980b). The items on the TEI were evaluated by Kazdin in a pilot study with 60 students in which the students also rated 15 Semantic Differential adjectives. The Semantic Differential was used (see Appendix A) because it was hoped the Evaluative subscale would support the TEI. The purpose of Kazdin's pilot study was to evaluate the TEI items. After applying factor analysis, one item was dropped leaving 15 items which were found to be reliable and were also supported by the Evaluative scale of the Semantic Differential scale (Kazdin, 1980b). In the current study, the TEI was modified (see Appendix B) to suit the purpose of assessing OBM and consisted of 14 questions (one was dropped due to lack of relevance).

The present experiment utilized 4 vignettes, both of which were modified versions of those constructed by Lynn Gramley (1992). The vignettes described 2 different scenarios, each one written in OBM terminology and in humanistic terminology (see Appendix C).

Procedure

The experiment was conducted in an open office at Conrail headquarters in Pittsburgh, Pennsylvania. When the female experimenter arrived, packets were distributed to each individual. These packets contained arbitrarily ordered

vignettes (one written in OBM terminology and one written in humanistic terminology). Each vignette was followed by a copy of both the TEI and the Semantic Differential scale with demographic questions on the very back page. After the packets had been distributed to the subjects they were greeted by the experimenter and told that if at any time they felt uncomfortable in participating in the experiment they were welcome to withdraw. They were then instructed to read the vignettes and to fill out the scales that immediately followed them as honestly as possible. Then, each subject rated one of the 2 scenarios written in both OBM terminology and in humanistic terminology on both the TEI and the Semantic Differential scales. The subjects were given as much time as needed to complete the task. Some performed the task immediately and some between other daily activities. The packets were collected at the end of the working day and the subjects were debriefed, and thanked for their participation in the rating of the acceptability of organizational behavior modification.

Results

The responses were scored from 1-7 with 7 representing acceptability and 1 representing unacceptability on the TEI, with 7 representing good and 1 representing bad on the Evaluative subscale of the Semantic Differential scale, with 7 representing strong and 1 representing weak on the Potency subscale of the Semantic Differential scale, and with 7 representing active and 1 representing passive on the Activity subscale of the Semantic Differential scale.

The means and standard deviations of the responses by the subjects to both types of vignettes on both the TEI and Semantic Differential including its three subscales (Evaluative, Potency, and Activity) were calculated (See Table 2).

Insert Table 2 about here

The means and standard deviations of responses for each of the subject groups (workers, first level management, and third level management) to both types of vignettes for both the TEI and the Semantic Differential scales were also calculated (See Tables 3 & 4).

Insert Tables 3 & 4 about here

Finally, means and standard deviations for the differences in scores between humanistic and OBM vignettes for each of the

groups responses on the TEI, the Semantic Differential scale and its subscales were calculated (See Table 5).

 Insert Table 5 about here

Paired t -tests on overall means were performed. The mean responses to the OBM and humanistic vignettes on the TEI were compared and a significant difference was found at the .10 significance level with the OBM vignettes being rated significantly more acceptable, $t(42)=-2.90$, $.0059 < p < .10$. The overall mean responses to the OBM and humanistic vignettes on the Semantic Differential were also compared but no significant difference was found, $t(44)=-1.41$, $p > .10$.

In comparing the subscales of the Semantic Differential scale, significance was found between the OBM and humanistic vignettes on the evaluative subscale. The OBM vignettes were rated significantly higher on the evaluative scale than the humanistic vignettes, $t(44)=-2.67$, $p < .10$. There was no significant difference between responses to the OBM and humanistic vignettes on the Activity subscale of the Semantic Differential scale, $t(44)=0.14$, $p > .10$.

One-way analyses of variance were performed between each of the variables, (TEI, Semantic Differential, Evaluative, Potency, and Activity) to compare the three groups of subjects (workers, first line management, and third line management). No significant differences were found in any of the these one-way

analyses of variance (See Table 6).

In addition, one-way analyses of variances were calculated for the differences among the groups on the TEI, Semantic Differential scale, and its subscales. In comparing the mean TEI responses among the three groups there were no significant differences between them, $F(2,41)=0.82$, $p > .10$. However, when comparing the overall mean response on the Semantic Differential scale among the three groups there were significant differences between the groups, $F(2,42)=2.67$, $.08 < p < .10$. This significance was found between the workers and first level management, $t(27)=2.21$, $0.03 < p < .10$. There was also significance when comparing the differences in responses between levels on the Evaluative subscale of the Semantic Differential scale, $F(2,42)=3.16$, $0.05 < p < .10$. This significance was found between workers and first level management $t(38)=2.41$, $0.02 < p < .10$, and between workers and third level management $t(7)=2.11$, $0.06 < p < .10$. Finally, there was a significant difference between the total humanistic responses on the Semantic Differential scale in comparison to employee level, $F(2,42)=2.70$, $0.07 < p < .10$. The significance was found between workers and first level management, $t(30)=2.21$, $0.03 < p < .10$.

There was no significance when comparing the differences between levels on either the Potency or the Activity subscales of the Semantic Differential scale, $F(2,42)=1.55$, $p > .10$, $F(2,42)=0.36$, $p > .10$ respectively.

Discussion

Despite the prediction, that humanistic vignettes would be rated significantly more acceptable than the OBM vignettes, the OBM vignettes were rated overall significantly more acceptable by the three groups of subjects on the TEI at the .10 significance level. These results contradict findings by Kazdin and Cole (1981), Woolfolk, Woolfolk, and Wilson (1977), Lynn Gramley (1992), and many other researchers who have found humanistic terminology to be significantly more acceptable than OBM terminology. Supporting Kazdin's findings (1980b), that the Evaluative subscale of the Semantic Differential scale should reinforce the results on the TEI, the OBM vignettes were also rated significantly more acceptable on the Evaluative subscale of the Semantic Differential scale.

Although there was a significant difference found between the OBM vignettes and the humanistic vignettes overall on the TEI and the Evaluative subscale of the Semantic Differential scale, there was no over all significance found between the two types of vignettes on the overall score of the Semantic Differential scale, or its other two subscales, Potency and Activity. This is odd because the TEI and the Semantic Differential scale are utilized together because they produce similar results and therefore more reliable results (Davis et al, 1989; Kazdin, 1980b; Kazdin and Cole, 1981). Actually, when comparing the means, for the totals of the Semantic Differential scale and the Potency and Activity subscales, they

are very similar. Although the actual results show OBM to be rated a little higher on the acceptability scales, the subjects responses are falling in a neutral zone. The discrepancy between the Semantic Differential scale and the TEI may be due to the fact that the Evaluative subscale is most like the TEI, however the Activity and Potency subscales are not as similar. In other words, it makes sense that the subjects had similar significant responses to the TEI and the Evaluative subscale of the Semantic Differential scale. When comparing the means of the Activity and Potency subscales for the humanistic and OBM vignettes, responses were quite neutral.

Although no significance was found when comparing each of the levels of employees on their overall responses to the OBM vignettes on the TEI, comparison of the means supports the present study's hypothesis and research done by Howard Berthold (1983). The means showed that third level management was most accepting of the OBM terminology followed by first level and workers respectively. The total scores on the Semantic Differential scale for the OBM vignettes did not support Berthold's research (1983) or the hypothesis; the calculations were not significant and when comparing the means first level management responded more acceptably towards OBM than did the third level management and workers respectively.

Similarly, supporting the hypothesis, responses to the humanistic vignettes were rated significantly more acceptable by the workers in comparison to the first line management who

rated the humanistic vignettes significantly less acceptable. In opposition to the hypothesis third level management rated the humanistic vignettes more acceptable than did first level management. These results were not found on the TEI. When comparing employee levels on the humanistic vignettes there was no significant difference between the levels responses. In addition, first level management rated the humanistic vignettes more acceptable than did the workers as opposed to the results on the Semantic Differential results. There was also no significant difference when the three groups were compared to the three subscales of the Semantic Differential scale, Evaluative, Potency, and Activity, for both the humanistic and the OBM vignettes.

When differences between the employee levels and their responses on the humanistic and OBM vignettes were considered there was a significant difference found on both the Semantic Differential scale and the Evaluative subscale of the Semantic Differential scale. On the Semantic Differential scale the significant difference fell between the workers and the first level management, but not between first level management and the third level management, nor between workers and third level management. This was in opposition to the proposed hypothesis which said that the biggest difference would be between the workers and the third level management. In addition overall on the Semantic Differential scale the first line management was more acceptable of OBM than third level management, also

in opposition of the hypothesis. In support of the hypothesis not only was there a significant difference between levels on the Evaluative subscale, but also the difference was between all three groups with third level management being the most accepting of the OBM vignettes. The difference on the TEI also leaned toward the hypothesis that third level management was most accepting of OBM, however there was no significant difference between the three groups.

Although significance for the current study is minimal (the only comparisons having significance being: TEI humanistic vs. TEI OBM, Evaluative subscale humanistic vs. Evaluative subscale OBM, Semantic Differential humanistic vs. employee level, Evaluative subscale differences vs. level, and Semantic Differential differences vs. level), there is evidence to support the hypothesis that management level employees support the use of OBM techniques more so than workers. This may be because people who see themselves as the object of a behavioral program rate it less favorably than the people who initiate a program.

There is also evidence contradicting the hypothesis in that OBM is being rated more acceptable not only by management, but also by workers. This is a positive finding for the world of business and psychology. Perhaps employers and employees are becoming more open to the idea of controlling behavior. In addition it may mean that psychologists who design the programs, and managers who implement them are communicating better the meaning, importance, and ethics of the programs.

In conclusion, the current study seems to shed a more positive light on the use of behavior modification in the work place. Although many of the comparisons were not statistically significant, in comparing the mean responses between the OBM and humanistic vignettes both workers and management replied with a more acceptable attitude of OBM than in past research (Woolfolk, Woolfolk, and Wilson, 1977; Kazdin and Cole, 1981). Since very little research has been done on the acceptability of behavior modification in industrial settings, obviously continued research on the use of OBM and its acceptability is desperately needed before any substantial conclusions can be made.

Some suggestions for future research would be first, to survey more subjects and second, to survey a variety of corporations versus just one to get a more representative sample of the business field and their attitudes towards OBM. In addition it may be beneficial to use different questionnaires to measure attitudes toward the OBM and humanistic vignettes, such as the BIRS. Several studies, including the present study and the study similar done by Lynn Gramley (1992), have found discrepancies between the conclusions drawn by the TEI and the Semantic Differential scale. This is a curious result because they are suppose to reinforce one another's reliability (Kazdin, 1980b).

Suggestions to further the acceptance of OBM by all levels of employees are first, to continue developing increased

communication between psychologists and managers. Second, managers and employees need to confront the issue head on; if one needs to predict and control behaviors, then behavior must be predictable and controllable (Berthold, 1975). Another approach may be to translate behavioristic jargon into more socially acceptable terms (Berthold, 1983). Another approach may be to translate OBM jargon into more socially acceptable terms, or to educate employers and employees of the OBM terminology. The most feasible answer seems to be to resist the dichotomy between humanism and behaviorism. There are two ways this can be done; through teachers and professors, and through behaviorists using humanistic terms to describe their feelings and concerns for people as much as possible (Berthold, 1983).

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Appendix A

A Copy of the Semantic Differential Scale

Please place your checkmarks on the line that best characterizes your reaction to the approach. If the scale is difficult to rate, still put a checkmark that best reflects your general reaction to the approach. There is no need to spend much time on any one of the items. Your first impressions and immediate feelings about the items is what we would like.

(Evaluative)

- good ___: ___: ___: ___: ___: ___: ___ bad
- pleasant ___: ___: ___: ___: ___: ___: ___ unpleasant
- kind ___: ___: ___: ___: ___: ___: ___ cruel
- valuable ___: ___: ___: ___: ___: ___: ___ worthless
- fair ___: ___: ___: ___: ___: ___: ___ unfair

(Potency)

- strong ___: ___: ___: ___: ___: ___: ___ weak
- hard ___: ___: ___: ___: ___: ___: ___ soft
- heavy ___: ___: ___: ___: ___: ___: ___ light
- large ___: ___: ___: ___: ___: ___: ___ small
- thick ___: ___: ___: ___: ___: ___: ___ thin

(Activity)

- active ___: ___: ___: ___: ___: ___: ___ passive
- sharp ___: ___: ___: ___: ___: ___: ___ dull
- hot ___: ___: ___: ___: ___: ___: ___ cold
- fast ___: ___: ___: ___: ___: ___: ___ slow
- ferocious ___: ___: ___: ___: ___: ___: ___ peaceful

Appendix B

A Copy of the TEI

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the approach. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this approach to be for the worker's problem behavior?

_____	_____	_____	_____	_____	_____
not at all			moderately		very
acceptable			acceptable		acceptable

2. How willing would you be to carry out this approach yourself if you had to change the worker's problems?

_____	_____	_____	_____	_____	_____
not at all			moderately		very
willing			willing		willing

3. How suitable is this approach for workers who might have other behavioral problems than these described for this worker?

_____	_____	_____	_____	_____	_____
not at all			moderately		very
suitable			suitable		suitable

4. If workers had to be assigned to an approach without their consent, how bad would it be to give them this approach?

_____	_____	_____	_____	_____	_____
very bad		moderately		not at all	
		bad		bad	

5. How cruel or unfair do you find this approach?

_____	_____	_____	_____	_____	_____
very cruel		moderately		not at all	
		cruel		cruel	

6. How consistent is this approach to common sense or everyday notions about what approaches in the workplace should be?

_____	_____	_____	_____	_____	_____
very different		moderately		very consistent	
or inconsistent		consistent			

7. To what extent does this approach treat the worker humanely?

_____	_____	_____	_____	_____	_____
does not treat		treats them		treats them	
humanely at all		moderately		very humanely	
		humanely			

8. To what extent do you think there might be risks in undergoing this kind of approach?

_____	_____	_____	_____	_____	_____
lots of risks		some risks		no risks	

9. How much do you like the procedures used in this approach?

_____	_____	_____	_____	_____	_____
do not like		moderately		like them	
them at all		like them		very much	

10. How effective is this approach likely to be?

_____ _____ _____ _____
not at all moderately very effective
effective effective

11. How likely is this approach to make permanent improvements in the worker?

_____ _____ _____ _____
unlikely moderately very likely

12. To what extent are undesirable side effects likely to result from this approach?

_____ _____ _____ _____
many undesirable some undesirable no undesirable
side effects side effects side effects

13. How much discomfort is the worker likely to experience during the course of the approach?

_____ _____ _____ _____
very much moderate no discomfort
discomfort discomfort at all

14. Overall, what is your general reaction to this type of approach?

_____ _____ _____ _____
very negative ambivalent very positive

Appendix C

A Copy of Each Vignette Used

John is a salesman for Hoover Cleaners Inc. In Detroit. John is constantly late for work. John's manager has decided to utilize operant conditioning to shape John's avoidance behavior so that everyday John will be to work on time. John's manager will control John's behavior through the use of both positive and negative reinforcement, but not punishment. The first step will be to have a co-worker model the appropriate behavior, getting to work on time, which will be followed by a reinforcer for this appropriate behavior. Then John will be expected to follow the model receiving reinforcers until his behavior has been shaped, and John's avoidance behavior has reached extinction.

(scenario 1, OBMOD)

John is a salesman for Hoover Cleaners Inc. in Detroit. John is constantly late for work. John's manager has decided to increase John's motivation in order to get him to work on time every day. His manager wants to redirect his purpose, change his attitude, and boost his self-esteem through giving him unconditional positive regard. John will be moved to an area where he will be more likely to notice his co-workers getting to work on time and to follow their behavior with the incentives offered. It is hoped that this will have a positive effect on John's attitude in that he too will want to exhibit

a new positive attitude. John's manager believes that John will fulfill more of his human potential once he starts coming to work on time everyday. (scenario 1, Humanistic)

Ann is a bankteller at a Midwestern bank. Ann takes her time with each customer and consequently, she only helps a third of the amount of people that her co-workers help in a day. Ann's boss wants to increase the number of people that Ann helps in a day to that of her co-workers. Ann's boss will shape Ann's behavior, positively reinforcing successive approximations of the desired behavior, of waiting on the same number of customers every day as her co-workers. Ann will also observe her co-workers who will serve as models of the appropriate behavior. Ann will be expected to continue to approach the desired behavior, receiving positive reinforcement for closer approximations and no feedback at all for regressions. Once Ann's behavior matches that of her co-workers for five consecutive days, the frequency of reinforcement by the boss will be reduced as natural reinforcers come to control behavior. (scenario 2, OBMOD)

Ann is a bankteller at a Midwestern bank. Ann takes her time with each customer and consequently, she only helps a third of the amount of people that her co-workers help in a day. Ann's boss wants to increase the number of people that Ann helps

in a day to that of her co-workers. Ann's boss wants to increase her motivation to help more people by, at first, putting her on probation for as long as she continues spending more than five minutes per customer. It is hoped that this will increase Ann's purpose. As Ann's human potential grows, her boss will give her praise and meet her needs by giving her more freedom again, as long as she continues to help the same amount of people as her co-workers. For a couple of days, Ann will be expected to observe the actions of her co-workers on the job and to then follow in their tracks receiving the incentives mentioned until she helps as many customers as her co-workers help in a day. Ann's boss feels that in the long run this will increase Ann's creativeness and in time, she will no longer need incentives.

(scenario 2, Humanistic)

Table 1
Summary of Research on Treatment Acceptability

Subjects	Independent Variable(s)	Dependent Measure(s)	Major Findings
Kazdin (1981)			
Undergraduate students	Treatment efficacy, and ratings of acceptability	TEI, Semantic Differential	Reinforcement more acceptable than other treatments (positive practice, time-out, medication), and effectiveness of treatment did not influence acceptability
Kazdin, French, & Sherick (1981)			
Children in treatment, Parents of children on unit, & Unit staff	Evaluation of clinical treatments on children with severe behavior problems	TEI, Semantic Differential	Reinforcement of incompatible behavior more acceptable than positive practice, medication, & time-out from reinforcement
Norton, Austen, Allen, & Hilton (1983)			
Elementary & middle school teachers, and parents	Acceptability and effectiveness of behavioral procedures for disruptive children	5 point Likert type scale	Teachers rated procedures as more acceptable and effective than did parents. In addition, more acceptable for 5 year olds than 10 year olds
McKee (1984)			
Regular education teachers	Teachers' knowledge of behavior principles, type of problem, type of intervention	TEI, Semantic Differential	High-knowledge teachers rated treatments more acceptable than did low-knowledge teachers; treatments were rated differentially, and reinforcement was significantly more acceptable than time-out and positive practice; ratings for the different problem cases were not different
Witt, Elliott, & Martens (1984)			
Preservice and student teachers	Intervention type (positive vs. reductive), teacher time involvement, behavior problem severity	IRP	Interventions that were positive and required less teacher time were most acceptable; severity of the behavior problem did significantly influence ratings of acceptability
Witt, Martens, & Elliott (1984)			
School teachers (kindergarten through Grade 12)	Intervention type, teacher time involvement, behavior problem severity	IRP	Interventions requiring more time to implement were least acceptable to teachers
Witt, Moe, Gutkin, & Andrews (1984)			
Regular and special education teachers	Jargon of Tx description, behavior problem severity, teacher experience	IRP	Pragmatic description was more acceptable than behavioral or humanistic descriptions; interventions were rated as more acceptable when the problem was severe; highly experienced teachers rated interventions as less acceptable
Martens, Witt, Elliot, & Darveaux (1985)			
Regular and special education teachers	Behavior problem severity; interventionist; case intervention modality	IRP-15, Semantic Differential	Interventions requiring moderate amounts of time were most acceptable interventions were rated as more acceptable when the problem behavior was severe
Witt & Robbins (1985)			
Regular education pre-school and Headstart teachers	Type or intervention, behavior problem severity, teacher experience; interventionist	IRP	Positive interventions were rated as more acceptable than reductive strategies; teachers with less

(table continues)

Table 1 (continued)

Subjects	Independent Variable(s)	Dependent Measure(s)	Major Findings
			experience rated interventions as more acceptable than did experienced teachers
Cavell, Frenz, & Kelley (1986a)			
Middle and high school teachers	Paradoxical treatments	TEI	Teachers rated paradoxical procedures as generally unacceptable and significantly lower than an unsuccessful contingency contract; ratings of the four paradoxical conditions varied according to rationale
Cavell, Frenz, & Kelly (1986b)			
Middle and high school teachers	Withdrawal of treatments	TEI	Acceptability of withdrawal conditions varied with respect to rationale
Epstein, Matson, Repp, & Helsel (1986)			
Regular and special education teachers	Five alternative treatment approaches	TEI	In two experiments, teachers could distinguish between treatments on the basis of their acceptability; no differences were found between regular and special education teachers or between children labeled as mentally retarded or learning disabled
Frenz & Kelley (1986)			
Mothers of children aged 2-12	Five alternative (reductive) Tx intervention	TEI	Treatments were rated as more acceptable when applied to a more severe behavior problem
Shapiro & Goldberg (1986)			
Sixth graders	Type of group contingency	CIRP; spelling performance	Group contingencies did not differentially affect spelling performance; however, sixth graders rated independent group contingency as more acceptable than the interdependent or dependent group contingency
Clark & Elliott (1987)			
Regular and special education teachers	Behavior problem type, intervention type, outcome information, teachers' intervention knowledge	BIRS; Teachers' Intervention Use Assessment	Teachers preferred modeling, coaching to overcorrection for social skills problems; treatment outcome information significantly influenced ratings of both acceptability and effectiveness
Elliott, Turco, & Gresham (1987)			
Regular education teachers	Rater, behavior problem severity, intervention type, sex of rater	CIRP; IRP	Children rated all three types of group contingencies as acceptable; teachers

Table 1 (continued)

Subjects	Independent Variable(s)	Dependent Variable(s)	Major Findings
			and psychologists rated dependent group contingencies as unacceptable, independent and interdependent forms as acceptable
Von Brock & Elliott (1987)			
Regular education teachers	Behavior problem severity, intervention type, outcome information	BIRS; Semantic Differential	Birs reliably measures acceptability and effectiveness; treatment outcome information was shown to influence ratings of treatments
Davis, Rawana, & Capponi (1989)			
Management staff	acceptability of behavioral staff management techniques		
Jenson (1991)			
Married student volunteers	Acceptability of treatment components commonly used with behavioral marital therapy	Expectancies for change inventory & TEI	Married female subjects preferred communication/problem solving skills training to behavioral exchange/contracting procedures
Lennox, Lindeman, Miltenberger, & Suda (1991)			
Mentally retarded who live in community residential facilities	Acceptability of behavioral treatments	Treatment acceptance scale	Dro rated more acceptable with mild behavior problems; when applied to severe behavior problems there was no significant difference
Rasnake, Martin, Tarnowski, & Mulick (1993)			
Direct care staff members employed at ICF	Acceptability of 6 behavioral treatments; DRO, DRI, Stimulus control, Overcorrection, Physical restraint, & shock	Intervention Rating Profile	Treatments requiring less labor and time were rated as more acceptable than interventions requiring more labor and time

Table 2

Means and standard deviations of overall scores for both types of vignettes on the TEI and Semantic Differential Scale and its subscales. In addition the difference between the two vignette scores.

	TEI	Sem.Diff.	Evaluative	Potency	Activity
<u>OBMOD</u>					
x =	4.44	4.24	4.73	4.01	3.98
s.d. =	1.66	1.26	1.72	1.63	1.35
 <u>Humanistic</u>					
x =	3.47	3.87	3.76	3.84	4.03
s.d. =	1.32	1.23	1.56	1.65	1.61
 <u>Difference</u>					
x =	-0.96	-0.36	-0.97	-0.17	0.04
s.d. =	2.18	1.73	2.43	2.38	2.20

Table 3

Means and standard deviations of the three groups responses to the OBM vignettes on the TEI, Semantic Differential Scale, and its subscales.

		<u>OBM</u>				
		<u>TEI</u>	<u>Sem.Dif.</u>	<u>Evaluative</u>	<u>Potency</u>	<u>Activity</u>
<u>Workers</u>						
x	=	4.20	4.09	4.25	3.93	4.10
s.d.	=	1.87	1.30	1.89	1.67	1.45
<u>1st Level Management</u>						
x	=	4.81	4.43	5.29	4.16	3.85
s.d.	=	1.35	1.26	1.42	1.66	1.24
<u>3rd Level Management</u>						
x	=	5.19	4.30	5.20	3.85	3.85
s.d.	=	0.87	1.24	1.09	1.67	1.45

Table 4

Means and standard deviations of the three groups responses to the Humanistic vignettes on the TEI, Semantic Differential scale, and its subscales.

		<u>Humanistic</u>				
		<u>TEI</u>	<u>Sem.Diff.</u>	<u>Evaluative</u>	<u>Potency</u>	<u>Activity</u>
<u>Workers</u>						
x	=	3.43	4.25	4.10	4.26	4.40
s.d.	=	1.32	1.11	1.65	1.63	1.58
 <u>1st Level Management</u>						
x	=	3.65	3.38	3.40	3.20	3.56
s.d.	=	1.38	1.32	1.41	1.69	1.64
 <u>3rd Level Management</u>						
x	=	3.12	3.68	3.25	4.00	3.80
s.d.	=	1.44	1.03	1.36	0.81	1.52

Table 5

Means and standard deviations for the differences between humanistic and OBM for each of the groups responses on the TEI, the Semantic Differential scale and its subscales.

		<u>Differences</u>				
		<u>Between Humanistic and OBM Responses</u>				
		<u>TEI</u>	<u>Sem.Dif.</u>	<u>Evaluative</u>	<u>Potency</u>	<u>Activity</u>
<u>Workers</u>						
x	=	-0.65	0.16	-0.15	0.33	0.30
s.d.	=	2.41	1.39	2.63	2.11	1.99
 <u>1st Level Management</u>						
x	=	-1.15	-1.05	-1.89	-0.96	-0.29
s.d.	=	1.63	1.92	1.96	2.66	2.43
 <u>3rd Level Management</u>						
x	=	-2.07	-0.61	-1.95	0.15	-0.05
s.d.	=	2.19	2.08	1.31	2.34	2.78

Table 6

One-way analyses of variance between each of the variables, TEI, Semantic Differential, Evaluative, Potency, and Activity, and the three groups.

	OBM	Humanistic
TEI	$F(2,41)=1.00, p > .10$	$F(2,40)=0.26, p > .10$
SD	$F(2,42)=2.70, p > .10$	$F(2,42)=2.70, 0.07 < p < .10^*$
Eval	$F(2,42)=2.05, p > .10$	$F(2,42)=1.25, p > .10$
Pote	$F(2,42)=2.19, p > .10$	$F(2,42)=0.11, p > .10$
Acti	$F(2,42)=0.17, p > .10$	$F(2,42)=1.42, p > .10$

* significance found between workers and first level management