CBID: COGNITIVE, BEHAVIORAL, AND INTERPERSONAL DEVELOPMENT A SKILL DEVELOPMENT/SOCIAL LEARNING APPROACH TO MANAGEMENT DEVELOPMENT

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ABSTRACT

It appears that the question most frequently asked in the Management Development and Education field over the last 20 years has been the issue of what should be learned. More recently, with the widespread application of the Behavioral Sciences, the question has become how it is to be learned. This article addresses both of these substantive issues, as well as an issue yet to be dealt with by human resource development practitioners and academicians. The following article deals with learning how to learn, and the implications of such a process, by attempting to integrate four existing theories into a model to guide curriculum construction for management training programs and experiential learning.

AN INTRODUCTION TO CBID

Childhood, culture, formal education, experiential learning, and even on-the--job experience often do not provide the appropriate learning experiences to produce effective managers. Since effective management and management education is a developmental process, the question is therefore, how are managers developed? Fortunately, effective management skills are much like many other acquired skills, in that they can be "learned". However, effective management is not comprised of only one set of skills to be leaned, but rather many skills that are complex and changing in nature.

The old quote "there is no one best way to manage" has a great deal of validity. Unfortunately, there appears to be many more poor ways to manage than effective ways. This is because managers or students of management typically have a weakness or deficit which tends to counteract or eliminate those management skills which would under some conditions be quite effective. For example, sometimes managers have the cognitive skills (intellectual abilities, knowledge of the task, etc.), but not the behavioral skills (concept of self and others, proper work attitudes. personality, etc.) and perhaps further deficit states exist in their interpersonal skills (ability to deal adequately with others, ability to build trust, ability to understand and function in a group context, etc.). Likewise sometimes managers have the behavioral or interpersonal skills necessary, but not the cognitive skills required.

Many management training, management education, and organizational development programs, even the most popular ones, concentrate an only one of these areas (i.e. cognitive, behavioral, or interpersonal). However, since effective management is comprised of cognitive, behavioral, and interpersonal skills, their overall development is essential. Fortunately, these skills can be learned through planned skill acquisition. It is upon this notion that the Cognitive, Behavioral, Inter-personal Development (CBID) model is based. In this sense, CBID is not a theory, but rather an educational framework from which complex behaviors, and subsequent managerial effectiveness can be forthcoming.

WHAT IS A SKILL

Unfortunately, no generally accepted broad-based definition of a human skill exists. This is in part due to two things. First, until recently, contemporary psychology has overly stressed a strictly controlled and well-defined methodology only possible in sterile laboratory conditions. While generating empirical data, these strict research paradigms have not adequately addressed the external validity provided by naturalistic environments. Second, this research methodology, striving for objectivity, has to a large extent relied on animals as subjects.

Only within the last several years has renewed interest in introspection and representative design caused a change in focus. It appears that due to this recent interest, as well as the increasing influence of developmental perspectives, that a generally accepted and broad-based definition of a human skill be proposed. Therefore, CBID proposes that most all human skills, especially a managerial skill, is comprised of the following four elements:

1. It requires the use of some attribute or factor of the individual.
2. It requires the application of some attribute or factor to a practical purpose or situation.
3. It is any attribute or factor of the individual that can be demonstrated by performance.
4. It can be improved by practice.

We might then say that there are many different types of skills; and since each individual is unique and possesses unique attributes and factors, the list of possible skills seems endless. However, CBID focuses primarily on those basic skills which are oriented to the development of the individual, the group, and the organization.

WHAT ARE COGNITIVE, BEHAVIOR, AND INTERPERSONAL SKILLS

The finite distinction between cognitive, behavioral, and interpersonal skills remains under great debate within contemporary psychology. CBID proposes that there are, however, certain common elements or factors, from which cognitive, behavioral, and interpersonal skills can be distinguished.

Cognitive Factors involve the intellectual and judge- mental aspects of the individual. Cognitive factors or attributes are those which are specific or unique to the individual alone and deal with mental operations and processes. Such factors include various aptitudes, learning ability, various perceptual abilities, relative intelligence or general knowledge, decision-making ability, problem-solving, memory, abstraction, search strategies, insight, coding, capacity, generation, and hypothesis testing.

Behavioral Factors involve the emotional and attitudinal aspects of the individual. Behavioral factors or attributes are those which are specific or unique to the individual alone and deal with the individual's personality operations and processes. Such factors include ego states, self-concept, motivation, frustration, avoidance, sociability, prejudice, tolerance, confidence, independence, sensitivity, conformity, passivity, competitiveness, conventionality, trust, acceptance, dominance, extraversion, rigidity, apathy, defensiveness, and conservatism.

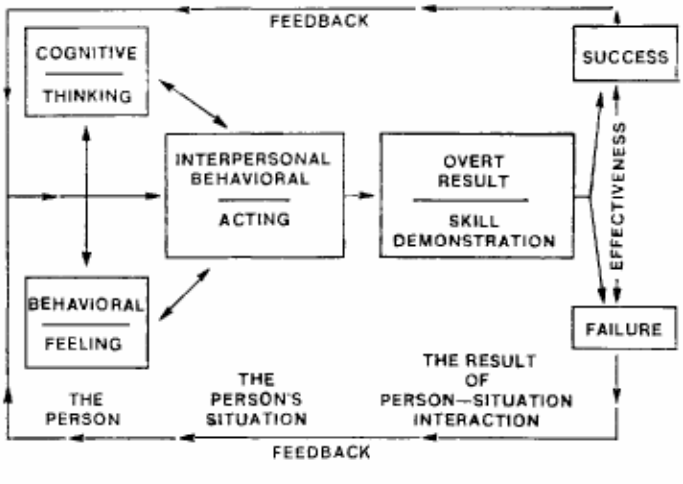
Interpersonal Factors involve the application of cognitive and behavioral factors of the individual to situations involving other individuals. Interpersonal factors or attributes are those factors which are specific or unique to the individual alone and deal with the processes and operations of two or more individuals **ex**periencing the same environment or common situation. Such factors include the ability to build acceptance, the ability to reduce conflict and aggression, the ability to provide empathy and understanding, the ability to facilitate decisions, the ability to reduce prejudice, the ability to motivate, the ability to learn from others and facilitate learning from others, and the ability to reduce anxiety.

Although these definitions do distinguish between cognitive, behavioral, and interpersonal factors, they in no way reflect the possible inclusion or exclusion of many others. CBID does, however, propose that these three factors, and their combination, can become skills by use, application to a practical situation or purpose, demonstration by performance, and improvement by practice.

THE CBID MODEL

Figure 1 illustrates the CBID Model. As shown in the model, CBID proposes that there are cognitive factors, behavioral factors, and interpersonal factors, which produce some form of overt result and subsequent success or failure of that result. Here, the cognitive and behavioral factors are those which are specific or unique to the individual. Thus, these primarily represent the individual. However, the interpersonal factors involve the application of cognitive and behavioral factors of the individual to a situation Involving other individuals. This condition represents the person's situation.

FIGURE 1
CBID MODEL



The arrows between cognitive, behavioral, and interpersonal factors indicate an interaction or dependency among these variables. An individual's cognitive factors are greatly dependent upon behavioral factors, as well as the environment or situation encountered. Similarly, an individual's behavioral factors are greatly dependent upon cognitive factors, as well as the environment or the situation encountered. Certainly, an individual's interpersonal factors are dependent upon cognitive and behavioral factors.

The result of the application of cognitive and behavioral factors to the situation Is some form of OVERT result. By overt result, it is meant that it is directly observable and measurable, and is demonstrated by PER- FORMANCE This is a function of the person-situation interaction or combination. The result will occur as either a success or failure, depending upon the effectiveness of the overt result. The effectiveness, or the success or failure of this overt result, acts as FEEDBACK and starts the developmental process over again.

Figure 1 also illustrates that cognitive factors can be seen as thinking. The behavioral factors can be seen as feeling, while interpersonal factors can be seen as acting. Thus, the three essential factors are made ea- sy to understand as follows:

CBID Model Made Easy
Thinking (Cognitive)
Feeling (Behavioral)
Acting (Interpersonal)

Further, the CBID Model illustrates that what an individual thinks (knows, remembers, conceives, etc.) is dependent upon how he feels (attitude, personality, motivation, etc.) and how he/she acts in the environment or situation encountered (the ability to be accepted, ability to facilitate decisions, ability to reduce anxiety, etc.). Similarly, what an individual feels is dependent upon what he thinks and how he/she acts in the situation or environment encountered. Clearly, how a person acts in a given situation or environment is dependent upon what they think and how they feel.

The process of thinking, feeling, and acting as demonstrated by Figure 1 is certainly not a new proposition. Philosophers, behavioral scientists, and laymen alike are all aware of their existence. Many personality theories make allowances for each. However, none tend to describe each fully, and certainly they do not thoroughly analyze the manner in which the factors are dependent upon one another. The basic premise behind Figure 1 is a conceptualization of human behavior referred to as interactionism, which can be seen as a ecologically oriented inquiry in contemporary psychology. A prominent interactionist, Ekchammar (1974), states "that neither the person per se nor the situation per se is emphasized, but the interaction of the two factors is responsible as the main source of behavioral variance." (1026)

One near-close attempt by theorists to integrate factors has been that of Jung (1933, 1953) who wrote extensively about the four fundamental psychological functions: thinking, feeling, sensing, and intuiting. Further, Jung posited that all four functions are not necessarily equally well developed. Jung, an introspective theorist, fell short of developing fully the area of overt behavior (i.e. acting). Unfortunately, contemporary psychologists such as Skinner (1969) have focused too narrowly on these overt behaviors alone. However, a more recent neo-behavioral perspective, as proposed by Bandura's (1977) social learning theory, tends to integrate the constructs of thinking, feeling, and acting in greater depth than Jung or Skinner.

From this newer perspective, Bandura (1977) states

that In the social view, people are neither driven by inner forces nor buffeted by environmental stimuli. Rather, psychological functioning is explained in terms of a continuous reciprocal interaction of personal and environmental determinants (pg. 11)." This perspective proposes that thought, affect, and overt behavior are influenced by observation as well as direct experience. Further, the human being is not solely at the mercy of environmental stimuli, but actively selects, organizes, and transforms stimuli In a goal-directed fashion.

The basic premise behind Figure 1, along with the notion of interactions in social leaning theory, can be found in the writings of Tolman (1932, 1948, 1949). Both interactionist and social learning theory have been greatly influenced by Tolman and other leaning theorists. Tolman proposed that behavior should be studied on the basis of a molar perspective, or the organized whole of behavior acts. Further, he felt that behavior was purposive, or goal-directed. Greatly influenced by Gestalt psychology, Tolman proposed that leaning is a process of discovering "what" leads to "what" in the environment. Tolman posited that an individuals knowledge is organized into a "cognitive map", rather than many stimulus-response pairs. Thus, the person develops through experience a "cognitive map" according to Tolman (1948) "indicating routes and paths and environmental relationships, which finally determines what responses, if any, will be released (pg. 82)."

Crucial to Tolman's notion of a cognitive map, and to the CBID model, are the expectations or hypotheses generated during development The cognitive map develops by confirming through experience some hypotheses and disconfirming others. Consistent confirmation of hypotheses or expectancies leads to what Tolman called a means-end readiness, or a belief. Thus, employees make use of environmental props or supports (stimuli) as means-object relationships toward a goal. Tolman proposed that people know many things about their environment but act upon then only when needed. Likewise, during skill acquisition and development a manager or student of management can construct a cognitive map which can lead to more effective managerial behavior.

Tolman (1949) further proposed what he called a field cognition mode. Field cognition modes are leaned strategies that are utilized while attempting to solve a problem. Thus, "knowledge of the world or the environment is used in planning out efficient action sequences (Hilagard and Bowers, 1975, p. 124)."

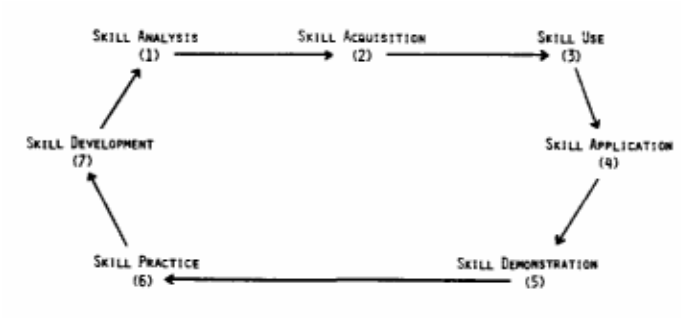
LEARNING HOW TO LEARN THROUGH CBID

Learning how to lean through the CBID model requires understanding in two essential areas. First, it requires an understanding of the skill-building process, and its various steps. Second, it requires the use and understanding of formulating CBID strategies, and their use in planned skill acquisition.

Skill Building Process

As shown in Figure 2, CBID proposes that skill-building is comprised of seven steps. The first step, that of skill analysis, is perhaps the most important. With respect to CBID, skill analysis would typically require an analysis of all the factors indicated in the CBID model shown in Figure 1. This would include the analysis of the overt result or skill demonstration desired, the effectiveness of that result, and the types of feedback available from the skill demonstration. Important also, would be the analysis of the cognitive, behavioral, and interpersonal skills required for successful skill demonstration. Skill analysis would also include the determination of how the various factors would combine or interact. From the stage of skill analysis, strategies may be planned for the development of the desired skill.

FIGURE 2
SKILL BUILDING PROCESS



The second stage shown in Figure 2 Is that of skill acquisition. Skill acquisition begins with skill analysis when the individual leans what the skill is he/she is trying to acquire, and the factors involved in such a process. Skill acquisition Is the step between understanding what the skill is, and using the desired skill. CBID proposes that one must have obtained a skill through some form of acquisition before it can be used. Skill acquisition is the process of knowing about the skill through skill analysis and then obtaining or possessing the factors or skills necessary to use them.

The third step is skill use. This pertains to the use of some attribute or factor of the individual. In the CBID model, skill use includes cognitive and behavioral factors, or thinking and feeling. These are the factors or attributes that are specific or unique to the individual alone and involve intellectual/perceptual and personality/attitudinal operations and processes. Skill use is the conscious or unconscious application of a skill in an appropriate or inappropriate situation, which nay or may not be goal-directed.

The fourth step as illustrated in Figure 2 is skill application. This step requires the application of some attribute or factor to a practical situation or purpose. In the CBID model, this factor is acting, and involves processes whereby the individual applies an attribute or factor to the situation or environment encountered. These factors or attributes are specific and unique to the individual alone and deal with the processes or operations of two or more individuals experiencing the same or common situation. Skill application is the rational use of some skill to a specific situation in a goal-directed fashion.

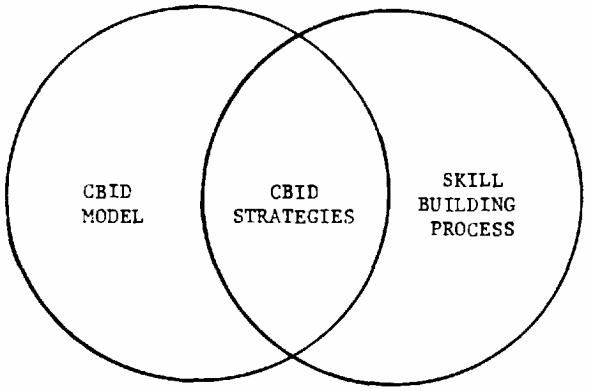
As shown in Figure 2, the fifth step is skill demonstration. This fifth step is the result of applying the individual's attributes or factors (thinking and feeling) to the situation or environment encountered (acting), and producing some form of skill demonstration. This then is the result of person-situation interaction or combination. In Figure 2, skill demonstration is shown as the overt result. Skill demonstration can be differentiated from skill application in that it implies demonstration by performance, allowing for objective measures that are both quantitative and qualitative. By this, it is meant that the demonstration by performance can be objectively measured in a quantitative and qualitative manner. It is in this step that, through consistent confirmation of hypotheses or expectancies, a means-ends readiness or a belief develops.

The sixth step in the skill-building process is skill practice. Skill practice is the continued demonstration by performance of a skill, It is from this continued demonstration by performance that feedback from the effectiveness (success or failure) of the skill demonstration may be obtained. Thus, the seventh step of the skill building process is skill development. Here, skill development is obtained as the skill is practiced and improved over time. The steps of skill practice and skill development represent the process of developing a cognitive map which over time indicates the routes, paths, and environmental relationships that determine what responses are desired.

CBID Strategies for Planned Skill Acquisition

The second aspect of leaning how to leant through CBID is the understanding of CBID strategies and their use In planned skill acquisition. Similar to Tolman's notion of a field cognition mode, CBID strategies utilize the person's knowledge of the world or environment in planning out efficient action sequences. As shown in Figure 3, CBID strategies are a combination of the CBID model and the Skill Building Process. The development and use of a CBID strategy utilizes the interactive factors (C;B;I'S *) of* the CBID model, and applies them to the skill building process. Thus, the development of a CBID strategy represents the results of skill analysis and initial acquisition of the skill.

FIGURE 3
CBID Learning Approach



CBID Strategy Development and Use

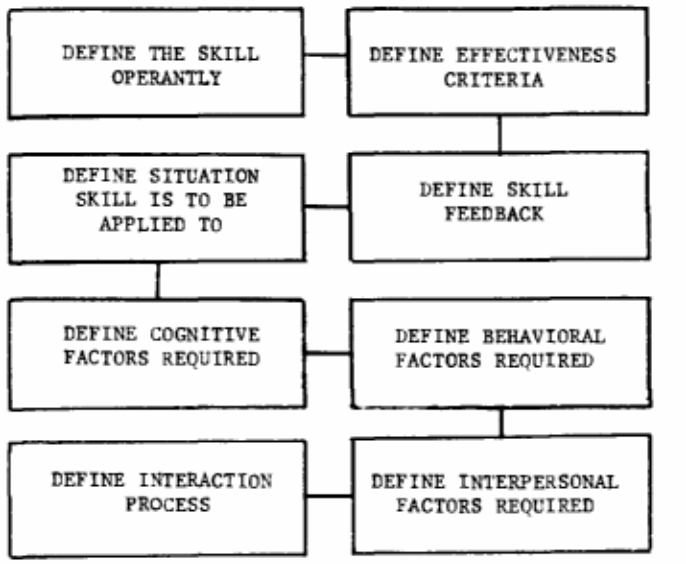
The flowchart of CBID Strategy Development and Use is shown in Figure 4. Depicted therein are the processes necessary for strategy development and as such must be systematically dealt with in the application of CBID training programs. The following example will serve as the vehicle for illustrating those processes.

Skill analysis is the first step in the development of a CBID strategy. To perform a skill analysis, the skill in question must be defined in operant terms. A definition must involve a description of the skill's properties and characteristics. Further descriptions of all the actions and processes is an equally necessary step.

Once a skill is described in descriptively discreet units, a definition of the effectiveness criteria is needed. This step is necessary in that skills can be performed effectively or ineffectively. The more direct approach to this definition is to describe what the skill will accomplish if it is a success and what will occur if the skill is a failure.

Skill feedback must be defined in terms of a description of success/failure feedback, i.e. what are the cues or signals that allow a manager to know progressional rates of skill accomplishment.

FIGURE 4
Flowchart of CBID Strategy Development



Since CBID receives theoretical and applied support from the notion that situational factors are important, a definition of the situation where skill performance takes place is necessary. The ingredients necessary for this definition are descriptions having the same foci as did skill feedback, which requires a definition of the skill in operant terms. That is, the properties and characteristics as well as the actions and processes, are situationally specific and must be described.

Now that the skill and the skill situation have been dealt with, cognitive factors must be considered. To do this, a description of what needs to be known about one's self as well as what needs to be known about the situation to be effective at the skill performance.

To continue this strategy development process, behavioral factors have to be defined. This definitional process requires a description of the manager's feelings about self and the feelings held by the manager about the situation. These activities must take place in order to achieve optimum skill effectiveness.

Next interpersonal factors that will play a role in the particular skill goal must be defined. This is accomplished by describing the application of cognitive and behavioral factors to the situation in which the skill will be performed.

Finally, interaction processes have to be defined. As is illustrated by the CBID model in Figure 1, each of the sets of factors cognitive, behavioral, and interpersonal do depend upon and are influenced by one another. It is imperative that this interactional process be dealt with. To illustrate, one must describe the ways cognitive factors can influence interpersonal factors and the situation, how cognitive factors might influence behavioral factors, and the ways behavioral factors can influence cognitive factors. Further, behavioral factors might influence interpersonal factors and the situation; they too must be described. Interpersonal factors and the situation are capable of influencing cognitive and behavioral factors and as such should be fully described. Last, the application of cognitive, behavioral and interpersonal factors to the situation need to be described to optimize skill effectiveness.

Paving completed these steps In the CBTD strategy development and consequence, the process is completed by skill use, application, demonstration, development and practice.

To summarize, CBID posits that each skill acquired by an individual can be developed to achieve optimum skill effectiveness if the processes defined herein are adhered to (Figure 4 is an overview of this CBID Strategy Development and use process).

CUD strategies can be used in one of three ways. First they can be used by an individual student of management, an employer, etc. wanting to develop a specific skill. This may be achieved by going through the flow chart and following through with the steps of the skill building process. Secondly, the CBID strategies development system can be used by an individual (student, employer) in the analysis (diagnosis, critique, etc.) of given examples of a person-situation interaction. Thirdly, the CBID strategy development system can be used by Management educators in the construction and delivery of their various educational methodologies. Figure 5 illustrates the various areas of application and the methodologies by which CBID nay be applied. As illustrated in Figure 5, the CBID model and the CBID Strategy Development System have a number of areas of application outside individual skill development. As is depicted by Figure 5, areas of application might range from lecture methods of training to discussion methods.

FIGURE 5
How CBID Strategies Can be Used

Areas of Application	Method of Application
1. Lecture	CBID nay be used in construction of lecture material by using model and various strategies to illustrate the various factors and their results.
2. Case	CBID may be used in the construction of case material or by the student in the analysis of the case
3. Gamming/ Simulation or Structured exercise	CBID may be used in construction of simulation or game and by an individual's participation in game or simulation
4. Role Play	CBID may be used In constructing the scenario of roles and situation: can also be used in analysis of appropriate vs. inappropriate strategies of role participants
5. Discussion	CBID may be used by participant to discuss topic through analysis of relevant factors, etc.

SUMMARY

To summarize, CBID is an educational strategy for individual and organizational learning. It is essentially the structuring of experience (i.e. leaning). It was proposed that many management development, management education and CD approaches to leaning are rote in that they profess one form of application to all situations. The uniqueness of CBID allows total freedom to structure experience and human development with respect to its individual and organizational relevance. Thus, it becomes not the freedom to be, but the freedom to become.

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