

From: Raven, J., & Stephenson, J. (Eds.). (2001). *Competence in the Learning Society* (pp. 225-235). New York: Peter Lang.  
Tables are at the end of the chapter.

## CHAPTER 15

### *The McClelland/McBer Competency Models*

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We have seen how the staff of David McClelland's consulting firm - McBer - conducted their competency studies in the 1970s and 1980s and evolved a framework for describing the nature and levels of those competencies. This was first published in full by Lyle and Signe Spencer in 1993 and updated and condensed into the *Scaled Competency Dictionary* in 1996.

Here our first step will be to back up somewhat so as to be able to set that framework in another context. Although our discussion will largely focus on the *measurement* procedures that have been used instead of being organised around an abstract discussion of what is meant by the terms that have been used to summarise research results, our concern will, in reality, be with the way of thinking that lies behind the measures. Despite the fact that there is a sense in which this chapter belongs with those on the *assessment* of competence, it is necessary for it to appear here because it provides an *operational definition* of the terms used in the McBer conceptual framework.

As we saw in Table 9.1 in our chapter summarising McBer's framework for organising the results of their Behavioural Event Interview-based studies of competence, the first generic competence they speak about is Achievement orientation. The table summarising their definition of this and how its levels are to be determined and described is reproduced in Table 15.2 below.

Before examining it we will, however, go back 40 years. During the early 1950s, McClelland and his co-workers sought to study a number of the "motives" identified by Murray (1938) experimentally. They started with a number of biological motives - the need for food, sex, and so on - and moved on to other motives such as the need for achievement, friends, and power.

What they did was starve people, make them sexually aroused, arouse their achievement motivation, and so on and then look to see what effects this had on the stories those concerned made up about what the characters in ambiguous pictures (a form of the Thematic Apperception Test known as the Test of Imagination) were thinking about, feeling, and doing.

This led to a coding system for analysing the content of these stories in ways which would summarise the effects of the experimental manipulations in terms of the concerns expressed by the stories' authors and the thoughts, feelings, and behaviours those authors attributed to the characters in their stories.

This coding framework was then applied to the stories people told when specific motives had *not* been aroused and to such things as stories in children's readers at different

periods in history. This yielded insights into different people's motives (and their competence to pursue them) and how population concerns changed over time (and with what social consequences).

One of the most significant findings from this work was that the things people saw the characters in their stories thinking about, feeling, and doing when specific motives were aroused were the *same* regardless of the motive that was aroused. People whose need was for food, sex, achievement, friends, or power all saw the characters in their stories doing the same kinds of things to satisfy those needs. Thus, they made plans, anticipated obstacles, turned their feelings and emotions into the task, sought the help of others, and persisted over a long period of time. Although neither McClelland nor any of his colleagues commented on it at the time, *the authors of the stories, in effect, saw the characters doing things which would enable them competently to satisfy their needs.*

The detailed coding systems that were developed by McClelland and his co-workers to assess the "strength" of people's Achievement, Affiliation, and Power "motives" were published in long appendices to a book edited by Atkinson published in 1958 under the title *Motives in Fantasy Action and Society.*

After having demonstrated the importance of the Achievement, Affiliation, and Power motives in determining individual and community life, McClelland and his colleagues began to wonder if these motives could be aroused and developed. The framework they developed for this purpose is outlined in a later chapter in this book.

Here what is important is that it occurred to them that one way in which it might be possible to encourage Achievement-oriented individuals to behave more *competently* - although they did not use that term then - would be to teach them the scoring system for the *need* Achievement motive.

The appendices to the Atkinson book by McClelland et al. were much too long and technical to be used for this purpose, so McClelland and Litwin condensed them into "*Brief Scoring Manuals*" for Achievement, Affiliation, and Power motivation.

Extensive extracts from the *Brief Scoring Manual* for *need* Achievement are reproduced as Table 15.1.

It works like this:

- 1) Examine the story for the presence of any one of the four clear signs of Achievement motivation - that is, for evidence of a desire for success in competition with others, competition with a self-imposed standard of excellence, concern with unique accomplishment, or long-term involvement. If none of these are present make no further attempt to score the story for Achievement motivation.
- 2) If there is clear evidence of a concern with Achievement motivation, *count up* how many of the following are present in relation to that kind of activity: Actual behaviour, positive feelings about goal achievement and/or negative feelings about failure, anticipation of obstacles from the environment and/or personal limitations and taking steps to surmount them; seeking help (or being helped), and using one's feelings or emotions to carry out the task effectively.

Note that, although McClelland and his colleagues did not draw attention to it, undertaking many of the activities listed under 2) is likely to make for competence in carrying out the activity.

*The scoring systems for Affiliation and Power worked in exactly the same way except that, for Affiliation, for example, the clear sign is a concern for "establishing, maintaining, or restoring a positive affective relationship with another person", a desire to be liked or accepted or forgiven. Motive "strength" is scored by counting up exactly the same things. Thus it is not true that "love is blind." Those who are concerned about, and good at establishing, warm*

relationships with others make plans, anticipate obstacles, monitor the effects of their actions and modify their behaviour accordingly, turn their emotions into the task, seek the help of others, persist over a long period of time, and so on. The same applies to Power, although it turned out that it is necessary to score the strength of socialised and personal power separately.

There are many important things to note about this scoring system. For example, it makes nonsense of the attempt to separate the cognitive, affective, and conative components of effective behaviour. What one thinks about is based on one's feelings, and it is feelings that beckon and encourage one to pursue - check out - possible ways forward. Likewise, it is negative feelings that tell one that one has "lost the scent." One initiates "experimental interactions with the environment" on the basis of hunches or feelings and then monitors the effects of one's actions and changes one's behaviour. These are not internally consistent "dimensions" of behaviour: The *more* of these activities one undertakes in the course of conducting a self-motivated activity, the more successful one is likely to be.

Not only does thinking involve feeling and persistence; *it does not make sense to attempt to assess the ability to think except in relation to an activity the individual concerned is strongly motivated to achieve.* No one is going to do all the difficult, demanding, time-consuming, and frustrating things that are required to "think" effectively unless they care about the activity. So it does not make sense to make general statements to the effect that a particular individual is good or bad at thinking.

Now, to jump forward 40 years, these insights seem somehow to have got lost in the *Scaled Competency Dictionary*.

As will be seen from Table 15.2, although, as we noted in a previous chapter, the "level" at which all competencies are said to be displayed depends on more than can be listed in a summary table, the level of competence at which self-motivated Achievement activities is being displayed (shown by the numbers down the left hand side) is now being assessed primarily from the breadth and depth of the *conceptual* analysis being undertaken (albeit that that involves wider organisational considerations and longer time horizons). Furthermore, as can be seen from Tables 15.3 and 15.4, both Analytic Thinking and Conceptual Thinking are being coded *independently of the activity in relation to which they are being displayed.*

According to the earlier model, the strength of Achievement motivation depends as much, if not more, on the extent to which the affective and conative components of effective behaviour are engaged as it does on the extent of cognitive activity. Further, as we have seen, it follows from the earlier model that analytic and conceptual thinking are *subsidiary* activities that cannot be measured or take effect on their own. They don't have *direct* consequences. People will only reveal the level at which they are capable of displaying these abilities while they are carrying out tasks they care about. According to the earlier model, it is therefore a mistake to present and discuss them in the way they are presented in the *Scaled Competency Dictionary 1996* and discussed in *Competence at Work*. The same goes for such traits as "self-confidence," "information-seeking," and "initiative." People who are good at carrying out affiliative tasks show a great deal of self-confidence and initiative *in that area*. They display a lack of self-confidence and initiative if they are confronted with an intellectual or power task.

What is more, the role of feelings, persistence, getting help, and so forth in carrying out "analytic thinking" etc. effectively is entirely missing from the later model.

This is not to say that the earlier model was necessarily the correct one. What we have here are two hard-to-reconcile frameworks for summarising extremely important programs of research. Because the tension between the two has the potential to provoke both conceptual re-thinking and a swathe of research we will return to it in a later chapter. Here it is perhaps sufficient to conclude by asking for the correlation between *n. Ach* assessed using the much-

trumpeted 1958 method and assessed using the - equally much-trumpeted - behavioural-event-interviewing method. It is hard to avoid the suspicion that it may not be much higher than that between Thematic Aptitude Test-based *n. Ach* and “personality test”-based *n. Ach*.

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**Table 15.1**  
 Extracts from:  
**A Brief Scoring Manual for Achievement Motivation**  
**D. C. McClelland and G. H. Litwin**  
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**I. Deciding Whether or Not a Story Shows Achievement Motivation**

In deciding whether or not an imaginative story shows evidence of the achievement motive, we first look to see if one of the characters is concerned about attaining an achievement goal. That is, does one of the characters have as his goal some sort of success in a situation which requires excellent performance? We have found there are four types of stories containing reference to an achievement goal, which we call Achievement Imagery. They are:

1. *Desire for Success in Competition with Others.* One of the characters is engaged in a competitive activity where winning or doing as well as or better than others is a primary concern. Typical examples are wanting to win a race, or contest, wanting to show the boss he can do the job well, feeling proud about being a winner, feeling sad about being a loser.
2. *Competition with a Self-Imposed Standard of Excellence.* Often the standard of excellence does not involve competition with others, but with a self-imposed standard of high-quality performance. Typical examples include wanting to do a good, thorough, workmanlike job, wanting to find a better method, working carefully on the plan, etc. A distinction should be made between intensity and quality. Working hard, or working fast, is evidence of concern over a standard of excellence only when the task demands intense effort. The worker may only want to get done by five o'clock. But a concern for accuracy, or quality, does imply a self-imposed standard of excellence.
3. *Unique Accomplishment.* One of the characters is involved in accomplishing other than an ordinary task which will mark him as a personal success. Inventions, artistic creations, and other extraordinary accomplishments fit in this category.
4. *Long-Term Involvement.* One of the characters is involved in attainment of a long-term achievement goal. Being a success in life, becoming a good machinist, doctor, lawyer, successful businessman, and so forth are all examples of career involvement which permit scoring for achievement motivation. However, mere mention of a job, or career, or even career goals, is not a sufficient basis for scoring. There must be evidence of involvement in a *long-term* career goal and this means some statement of wanting, or feelings about, goals that lie 5 to 10 years away.

If a story shows evidence of achievement Imagery, through one or more of the categories described above, we give that story one (1) point to begin with.

Other stories, not showing such evidence, are scored Doubtful (TI), and are given a score of zero (0); or they are scored Unrelated Imagery (UI) . . . The difference between Doubtful and Unrelated stories is usually that Doubtful stories contain some reference to a commonplace task, or solving a routine problem, but do not meet the criteria described above, while the unrelated stories contain no reference whatsoever to achievement. Stories scored TI or UI are not scored further.

Below are examples of three stories which show achievement motivation. The fourth story is scored UI because it contains no evidence of Achievement Imagery.

1. The boy is watching the older man do something that *the boy is trying to learn to do*. The boy was trying to do this but he was doing it wrong and the old man is showing him how. The boy is a little downhearted. He *knows he can do it if he is a little harder*. The man is calm and patient with the boy and is trying to teach him. The boy will watch and the man will allow the boy to try again and the *boy will do well because I think he is determined to do it*. (Competition with a standard of excellence.)
2. The boss is talking to an employee. The boss wants the employee, an engineer, to start working on a *specialty designed carburetor for a revolutionary engine*. The job will come off OK, and the engine will *revolutionize* the automobile industry. (Unique accomplishment)

3. *The boy is thinking about a career as a doctor. He sees himself as a great surgeon performing an operation.* He has been doing minor first aid work on his injured dog, and has discovered that he enjoys working with medicine. He thinks he is suited for this profession and sets it as an ultimate goal in life at this moment. (Long-term involvement)
4. The boy is daydreaming of some picture he may have seen or is projecting himself into the future, putting himself into the situation as it would be if he were a man. The boy has seen a movie. The boy is thinking of how he would like to be in the situation as seen.

## **II. Determining the Strength of Achievement Motivation**

Once we have decided that a story contains evidence of the achievement motive and given it one point, we may go on to determine the strength of the motive. We do this by seeing if the phrases and expressions of the story can be fitted into the pre-established *scoring categories* which follow. When one (or more) of these categories appears in a story, we give an additional point (or points). If one story contains evidence of, say, five of these categories, and another evidence of only three, we can say that the writer of the first has greater achievement motivation than the writer of the second. The categories are as follows: a story gets one additional point for each category of response included. A given category is scored only once per story.

### **A. Stated Need for Achievement (N)**

Someone in the story states the desire to reach an achievement goal. Expressions such as "He *wants* to be a doctor," "He *wants* to finish the painting," "He *hopes* to succeed" are the clearest examples. Need should not be inferred from the activity described in a story. It may seem obvious to the scorer that characters who are working furiously toward an achievement goal must want to succeed. But Need is scored only when there is a definite statement of desire to attain an achievement goal.

### **B. Activity (A)**

Activity is scored when something is actively being done by one of the characters within the story in order to attain an achievement goal. The activity may be overt or mental and its outcome may be successful, doubtful, or unsuccessful. For example, the statement "The man worked hard to make money and failed," would be scored Activity since it contains the necessary three elements of Activity: an activity (work), a goal (making money), and an outcome (failure).

### **C. Goal Anticipation (Ga+, Ga-)**

Someone in the story anticipates, or expects, goal attainment or frustration and failure. The Anticipation is Positive when someone is thinking about the success he will achieve, expects that the invention will work, dreams of himself as a great surgeon. The Anticipation is Negative when someone is worried about failure, is concerned over the possibility that the invention won't work, expects the worst, or is wondering whether or not he will succeed. Both Positive and Negative Anticipations may be scored in the same story, but each may be scored only once

### **D. Personal and Environmental Blocks (Bp, Bw)**

Stories are scored for Blocks when the progress of goal-directed activity is blocked or hindered in some way. Things do not run smoothly. There are obstacles to be overcome before the goal may be attained. The Block may be a previous failure or personal lack which must be overcome before further progress toward the goal is possible, or the Block may be a present environmental or personal factor. If the Block is located within the individual (lack of confidence, a conflict to be overcome, inability to make decisions, or some past failure), it is called a Personal Block (Bp). When the block to be overcome is part of the environment, that is, when it is located in the world at large such as "The invention was almost finished when the gasket broke," "His family couldn't afford to send him to medical school," it is called an Environmental Block (Bw). Both personal and environmental blocks may occur and be scored in the same story, but each is scored only once per story.

**E. Help (H)**

Help is scored when somebody in the story aids a character in the story who is engaged in an achievement-related activity. Someone aids, sympathizes with, or encourages the person striving for achievement. The assistance is in the direction of the achievement goal. For example, "The experienced machinist is trying to straighten things out for the apprentice and is encouraging him." Help must always be considered from the point of view of the character or characters in the story who are striving for achievement.

**F. Feelings (F+, F-)**

Feelings associated with goal attainment, active mastery, or frustration of the achievement-directed activity are scored. When someone in the story feels good at active mastery or definite accomplishment. "He *enjoys* painting," "He is proud of his accomplishment," "They are very *satisfied* with their invention," F+ is scored. When someone in the story feels bad at failure to attain an achievement goal "He is *disturbed* over his inability", "He is *discouraged* about past failures," "He is *disgusted* with himself," F- is scored. Both Positive and Negative Feelings may occur and be scored in the same story, but each may be scored only once per story. Feelings are only scored when associated with the achievement-related activities of the story, as is the case for all our other categories.

**G. Achievement Theme (Th)**

Achievement Theme is scored when it is evident that the major plot or theme of the story is concerned with achievement. Striving for an achievement goal and eventual attainment of the goal may be the central plot of the story. The decision to be made by the scorer is whether or not the whole story is an elaboration of the achievement-related activity sequence. If there is a major counterplot, or if there is any doubt about achievement being central to the plot, Achievement Theme is not scored. Note that we may score for achievement motivation without the story being scored for Achievement Theme. The latter is scored only when achievement becomes the principal concern of the story.

**Table 15.2**

Summary of Scoring System for  
**Achievement Orientation (ACH)**

From McBer's *Scaled Competency Dictionary 1996*

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<p><b>Achievement Orientation:</b> A concern for working well or for surpassing a standard of excellence. The standard may be one's own past performance (striving for improvement); an objective measure (results orientation); outperforming others (competitiveness); challenging goals one has set; or even what anyone has ever done (innovation). Thus a unique accomplishment also indicates ACH.</p>	
<p><i>Core: Does the person think about meeting and surpassing goals and taking calculated risks for measured gains?</i></p>	
Level	This Person:
1.	<b>Wants to Do Job Well:</b> Tries to do the job well or right. May express frustration at waste or inefficiency (e.g., gripes about wasted time and wants to do better) but does not cause specific improvements.
2.	<b>Creates Own Measures of Excellence:</b> Uses own specific methods of measuring outcomes against a standard of excellence not imposed by others. May focus on new or more precise ways of meeting goals set by management. (Code specifically for spontaneous interest in measuring outcomes or performance excellence.)
3.	<b>Improves Performance:</b> Makes specific changes in the system or in own work methods to improve performance (e.g. does something better, faster, at lower cost, more efficiently; improves quality, customer satisfaction, morale, revenues), without setting any specific goal. (The improvement <i>must</i> be noticeable and could be measurable. Code even if outcome is still unknown, or if it is less successful than hoped.)
4.	<b>Sets and Works to Meet Challenging Goals:</b> "Challenging" means there is about a 50-50 chance of actually achieving the goal - it is a definite stretch, but not unrealistic or impossible. <i>OR</i> refers to specific measures of baseline performance compared with better performance at a later point in time: e.g., "When I took over, efficiency was 20% flow it is up to 85%." (Goals which are not clearly both challenging and achievable should, however, be coded at level 2 - as evidence of competing against a standard of excellence. If scoring for level 4, don't score for 3 for the same actions or activity in story.)
5.	<b>Makes Cost-Benefit Analyses:</b> Makes decisions, sets priorities or chooses goals on the basis of <i>calculated</i> inputs and outputs: makes <i>explicit</i> considerations of potential profit, Return-on-Investment or cost-benefit analysis. Analyzes for business outcomes. (To code, the person must show: 1) specific mention of costs <i>and</i> 2) specific benefits, <i>and</i> 3) a decision based on the balance between them.)
6.	<b>Takes Calculated Entrepreneurial Risks:</b> Commits <i>significant</i> resources and/or time (in the face of uncertainty) to increase benefits, (i.e., improve performance, reach a challenging goal, etc.). In scoring for level 6, you should also code for evidence of lower levels as they occur to capture the richness and depth of ACH thinking.



**Table 15.3**  
 Summary of Scoring System for  
**Analytical Thinking (AT)**  
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<b>Analytical Thinking:</b> Understanding a situation by breaking it apart into smaller pieces, of tracing the implications of a situation in a step-by-step way. Analytical Thinking includes organizing the parts of a problem, situation, etc., in a systematic way; making systematic comparisons of different features or aspects; setting priorities on a rational basis; identifying time sequences, causal relationships or If-Then relationships.	
<i>Core: Does the person understand cause-and-effect chains and relationships?</i>	
Level	This Person:
1.	<b>Breaks Down Problems:</b> Breaks problems into simple lists of tasks or activities, without assigning values. Makes a list of items with no particular order or set of priorities.
2.	<b>Sees Basic Relationships:</b> Takes apart problems into pieces. Links together pieces with a single link: A leads to B; can separate into two parts: pro and con. Sorts out a list of tasks in order of importance.
3.	<b>Sees Multiple Relationships:</b> Breaks down a problem into smaller parts. Makes multiple causal links: several potential causes of events, several consequences of actions, or multiple-part chains of events (A leads to B leads to C leads to D). Analyzes relationships among several parts of a problem or situation. Anticipates obstacles and thinks ahead about next steps. (Code level 2 as a default if you are unsure about the complexity of the problem or situation broken down by interviewee.)
4.	<b>Makes Complex Plans or Analyses:</b> Uses several analytical techniques to break apart complex problems into component parts. Uses several analytical techniques to identify several solutions and weighs the value of each. (This is more than the linear breaking down of problems in level 3. Code level 4 for <i>multiple</i> causal-leading to more than one possible solution.)

**Table 15.4**  
 Summary of Scoring System for  
**Conceptual Thinking (CT)**  
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<b>Conceptual Thinking:</b> The ability to identify patterns or connections between situations that are not obviously related, and to identify key or underlying issues in complex situations. It includes using creative, conceptual or inductive reasoning.	
<i>Core: Does the person match patterns? Assemble many pieces into a coherent whole? Create new ways to look at things?</i>	
Level	This Person:
1.	<b>Uses Basic Rules:</b> Uses simple rules (“rules of thumb”), common sense, and past experiences to identify problems. Recognizes when a current situation is exactly the same as a past situation.
2.	<b>Sees Patterns:</b> When looking at information, sees patterns, trends, or missing pieces. Notices when a current situation is similar to a past situation, and identifies the similarities.
3.	<b>Applies Complex Concepts:</b> Uses knowledge of theory or of different past trends or situations to look at current situations. Applies and modifies complex learned concepts or methods appropriately; e.g., statistical process control, TQM demographic analysis, managerial styles, organizational climate, etc. This is evidence of more sophisticated pattern recognition.
4.	<b>Clarifies Complex Data or Situations:</b> Makes complex ideas or situations clear, simple, and/or understandable. Assembles ideas, issues, and observations into a clear and useful explanation. Restates existing observations or knowledge in a simpler fashion. (The coder should look for evidence of the ability to see a simpler <i>pattern</i> within complex information.)
5.	<b>Creates New Concepts:</b> Creates new concepts that are not obvious to others and not learned from previous education or experience to explain situations or resolve problems. (To score level 5, the coder should be convinced that the concept is new and should be able to cite specific evidence. Do not also score for Innovation.)