

## ASSESSING EXPLANATORY STYLE: THE CONTENT ANALYSIS OF VERBATIM EXPLANATIONS AND THE ATTRIBUTIONAL STYLE QUESTIONNAIRE

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**Summary**—We compare two methods of assessing explanatory style—the content analysis of verbatim explanations (CAVE) and the Attributional Style Questionnaire (ASQ). The CAVE technique is a method that allows the researcher to analyze any naturally occurring verbatim materials for explanatory style. This technique permits the measurement of various populations that are unwilling or unable to take the ASQ. We administered the ASQ and Beck Depression Inventory (BDI) to 169 undergraduates and content analyzed the written causes on the ASQ for explanatory style by the CAVE technique. The CAVE technique correlated 0.71 with the ASQ ( $P < 0.0001$ ,  $n = 159$ ) and  $-0.36$  with BDI ( $P < 0.0001$ ,  $n = 159$ ). The ASQ correlated  $-0.51$  with the BDI ( $P < 0.0001$ ,  $n = 160$ ). Both the CAVE technique and the ASQ seem to be valid devices for assessing explanatory style.

Explanatory style is the habitual pattern of explanations an individual makes for good and bad events. According to the reformulation of the learned helplessness model, individuals with a pessimistic explanatory style are more likely to display helplessness deficits when confronted with a bad event than individuals with an optimistic explanatory style (Abramson, Seligman and Teasdale, 1978; Seligman, Abramson, Semmel and von Baeyer, 1979). When they experience bad events individuals who habitually construe the causes of bad events as internal, stable, and global (“it’s my fault, it’s going to last forever, and it’s going to undermine everything I do”) should be more susceptible to helplessness deficits than those with the opposite style. The Attributional Style Questionnaire (ASQ; Seligman *et al.*, 1979; Peterson, Semmel, von Baeyer, Abramson, Metalsky and Seligman, 1982), a questionnaire in which *Ss* generate a cause and then rate the cause they generate on a 1–7 scale for internality, stability and globality, is the primary instrument for measuring explanatory style.

Peterson and Seligman (1984) reviewed 12 studies which confirm the reformulation; depressive deficits were associated with a pessimistic explanatory style in students, depressed patients, prisoners, and children. Sweeney, Anderson and Bailey (1986) and Robbins (1988) did meta-analytic reviews and found strong evidence of the predicted relationship between attributional style and depression. Other, less complete reviews, (e.g. Brewin, 1985; Coyne and Gotlib, 1983; Peterson, Villanova and Raps, 1985) were more mixed in their findings.

Considering the potential of explanatory style for diagnostic and predictive uses, Peterson, Luborsky, and Seligman (1983), developed a content analytic technique that allows researchers to assess explanatory style in populations that cannot or will not take questionnaires. Any spoken or written materials can be analyzed for explanatory style by treating spontaneously occurring events and their explanations as if they were questionnaire items and having a panel of judges rate them. We are currently analyzing such varied materials as newspaper quotes, therapy transcripts, diaries, political speeches, audiotaped diagnostic interviews, and personal letters and essays to predict such varied phenomena as sports achievement, life span, presidential election outcomes, depression, recovery from depression, immune functioning and the course of cancer. We have discovered that such materials are rich enough in naturally occurring good or bad events and their explanations to assess explanatory style.

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This study investigates the relationship between the ASQ and the CAVE techniques as well as their validity with respect to depressive symptoms.

### *Method*

*Subjects and questionnaires.* We administered the Attributional Style Questionnaire (ASQ; Seligman *et al.*, 1979; Peterson *et al.*, 1982) and the Beck Depression Inventory (BDI; Beck, 1967) to 169 volunteer University of Pennsylvania undergraduates in an Abnormal Psychology class. The BDI is a self-report measure that questions the subject on the degree to which each of 21 depressive symptoms is present.

The ASQ is a self-report instrument that yields scores for explanatory style for bad events and good events using three causal dimensions—internal vs external, stable vs unstable, and global vs specific causes. Because we are interested in style—cross-situational explanations—the ASQ presents 12 hypothetical events. Half are good events and half are bad events. First, the *S* is asked to write down the one major cause of the hypothetical event. Then the *S* is asked to rate the cause along a 7-point continuum for each of the three causal dimensions.

We used a parallel technique for measuring the subjects' explanatory style—the content analysis of verbatim explanations (CAVE; Peterson *et al.*, 1983). This technique permits the analysis of any spoken or written materials along the three causal dimensions. Undergraduate students, with only an introductory course in Psychology required, are trained over a 1 week period in how to extract good and bad events and their accompanying explanations and how to rate those explanations along the 7-point continuum for each dimension (Schulman, Castellon and Seligman, 1988). We have also developed a self-administered training package as an introduction to and partial replacement of the 1 week training program. This recently developed technique has shown promising results in the prediction of immune functioning, political election outcomes, depression, sports achievement, and health across middle age (Kamen, Rodin, Dwyer and Seligman, 1989; Zullo, Oettingen, Peterson and Seligman, 1989; Peterson, Vaillant and Seligman, 1988; Peterson, Bettes and Seligman, 1985). See the Appendix for the "Guidelines for Extracting and Rating Spontaneous Explanations", which is a synopsis of the CAVE training.

For this study, each hypothetical event and the cause that the test-taker wrote down was extracted from their ASQ, typed out, randomized with the events and explanations of the other *S*s and given to three raters. The raters, therefore, were blind as to who the *S* was, what other explanations they gave, and what their depression score was. Three raters analyzed the cause written by the *S* for each event.

We included a *S*'s ASQ score only if they responded to every question on the questionnaire. We included a *S*'s CAVE score if they had written causes for at least 5 out of the 6 hypothetical good events and 5 out of the 6 hypothetical bad events. Occasionally, test-takers would respond to the three questions about the cause without actually writing in the cause. Also, we did not have completed BDIs for all *S*s. This explains the different sample sizes for the two measures.

*Dependent measures.* We used three composite scores derived from the ASQ—composite negative explanatory style (CoNeg), which is the composite score for the 6 bad events, summing across internal, stable, and global dimensions; composite positive explanatory style (CoPos), the composite score for the 6 good events; and a total score, composite positive minus composite negative (CPCN), the difference score between CoPos and CoNeg. Past research (Peterson and Seligman, 1984) indicates that CoNeg and CPCN are the most valid empirical predictors of depressive deficits. The same three composite scores derived from the ASQ—CoPos, CoNeg and CPCN—were also generated from the CAVE technique. The BDI yields a single score that represents the *S*'s level of depression.

### *Results*

*Interrater reliability.* Using a Cronbach's  $\alpha$  analysis (1951), interrater reliability for the CAVE technique was a satisfactory 0.80 for CoNeg and 0.80 for CoPos. Broken down by individual dimension,  $\alpha$  for bad events were 0.93 for internal, 0.63 for stable and 0.73 for global. For good events,  $\alpha$  were 0.95 for internal, 0.66 for stable and 0.48 for global. Since reliabilities are better

for the composite variables than for the individual dimensions, we focus on the composite variables.

*Internal consistency.* Using a Cronbach's  $\alpha$  analysis (1951), internal consistency for the ASQ was a satisfactory 0.74 for CoNeg and 0.80 for CoPos. By individual dimension,  $\alpha$  for bad events were 0.28 for internal, 0.56 for stable and 0.68 for global. For good events,  $\alpha$  were 0.61 for internal, 0.61 for stable and 0.65 for global. Again, we rely primarily on the composite measures.

*Consistency across valence.* Correlations between CoNeg and Copos were small but significant:  $-0.15$  for CAVE ( $P < 0.04$ ,  $n = 169$ ) and  $-0.24$  for the ASQ ( $P < 0.002$ ,  $n = 160$ ). This shows that the explanatory style for good events is slightly negatively correlated with the explanatory style for bad events and that the two should be analyzed separately.

*Intercorrelations between individual dimensions.* Correlations between dimensions were, in general, highly significant for both the ASQ and CAVE. See Table 1 for intercorrelations.

*Means and standard deviations.* Means and standard deviations are presented in Table 2. A paired comparison analysis revealed that the CAVE ratings are significantly less optimistic for CoPos and significantly more optimistic for CoNeg ( $P$ 's  $< 0.0001$ ,  $n$ 's = 159). A closer look at the individual dimensions revealed that these differences are accounted for by significantly less optimistic ratings for stable positive and global positive and significantly more optimistic ratings for global negative for CAVE than for the ASQ ( $P$ 's  $< 0.005$ ,  $n$ 's = 159).

*Construct validity.* Do the test-taker's ratings of their explanations on the ASQ correlate with the raters' ratings of those same explanations? The CAVE technique correlated highly with the ASQ. Correlations were 0.71 for CPCN, 0.48 for CoNeg and 0.52 for CoPos ( $P$ 's  $< 0.001$ ,  $n$ 's = 159). Broken down by individual dimensions, correlations were 0.61 ( $P < 0.0001$ ) for internal negative, 0.24 ( $P < 0.002$ ) for stable negative, 0.28 ( $P < 0.0003$ ) for global negative, 0.67 ( $P < 0.0001$ ) for internal positive, 0.30 ( $P < 0.0001$ ) for stable positive and 0.07 (NS) for global positive. Global positive is handicapped by a low interrater reliability (0.48). So although there are significant absolute differences between the CAVE and ASQ measures, the raters are, more importantly, systematically preserving the relative ranking.

*Concurrent validity.* Both the CAVE technique and the ASQ correlated significantly with the BDI, but the ASQ had higher correlations. For the CAVE technique, correlations were  $-0.36$  for CPCN ( $P < 0.0001$ ), 0.25 for CoNeg ( $P < 0.001$ ) and  $-0.29$  for CoPos ( $P < 0.0002$ ,  $n$ 's = 159). For the ASQ, correlations were  $-0.51$  for CPCN, 0.46 for CoNeg, and  $-0.35$  for CoPos ( $P$ 's  $< 0.0001$ ,  $n$ 's = 160). See Table 3 for correlations of the individual dimensions.

## DISCUSSION

The CAVE technique had satisfactory interrater reliabilities and the ASQ had satisfactory internal consistency. The CAVE technique correlated highly significantly with the ASQ and

Table 1. Intercorrelations between dimensions

Dimension	(1)	(2)	(3)
<u>CAVE: (<math>n = 169</math>)</u>			
Good events:			
(1) Internal		0.48**	0.45**
(2) Stable			0.44**
(3) Global			
Bad events:			
(1) Internal		0.04	0.44**
(2) Stable			0.23*
(3) Global			
<u>ASQ: (<math>n = 160</math>)</u>			
Good events:			
(1) Internal		0.35**	0.42**
(2) Stable			0.48**
(3) Global			
Bad events:			
(1) Internal		0.71**	0.36**
(2) Stable			0.52**
(3) Global			

\* $P < 0.01$ ; \*\* $P < 0.0001$ .

Table 2. Means and standard deviations

	Mean	Standard deviation
CAVE: ( <i>n</i> = 169)		
CPCN	2.1	2.4
CoPos	12.4	1.7
CoNeg	10.3	1.4
Internal negative	4.1	0.9
Stable negative	3.8	0.6
Global negative	2.4	0.5
Internal positive	5.5	1.0
Stable positive	4.0	0.6
Global positive	2.9	0.4
ASQ: ( <i>n</i> = 160)		
CPCN	4.0	3.2
CoPos	15.5	2.0
CoNeg	11.5	2.0
Internal negative	4.0	0.8
Stable negative	4.0	0.7
Global negative	3.5	1.1
Internal positive	5.3	0.8
Stable positive	5.3	0.7
Global positive	5.0	0.9

Table 3. Correlations between CAVE and the ASQ with the BDI

Variable	<i>r</i>	<i>P</i>
CAVE: ( <i>n</i> = 159)		
CPCN	-0.36	0.0001
CoNeg	0.25	0.001
CoPos	-0.29	0.0002
Internal negative	0.22	0.006
Stable negative	0.12	0.14
Global negative	0.16	0.04
Internal positive	-0.34	0.0001
Stable positive	-0.16	0.04
Global positive	-0.11	0.17
ASQ: ( <i>n</i> = 160)		
CPCN	-0.51	0.0001
CoNeg	0.46	0.0001
CoPos	-0.35	0.0001
Internal negative	0.36	0.0001
Stable negative	0.35	0.0001
Global negative	0.37	0.0001
Internal positive	-0.39	0.0001
Stable positive	-0.34	0.0001
Global positive	-0.15	0.05

although both the ASQ and the CAVE technique correlated significantly with depression, the ASQ had a higher correlation.

Each technique has advantages and disadvantages. This study suggests that the ASQ may have better validity in predicting depression. Having the test-taker rate their own extractions on the ASQ is probably a more accurate measure of their explanatory style. There may also be an advantage to using the hypothetical events on the ASQ. The hypothetical and ambiguous nature of the events on the ASQ encourages the test-taker to 'project' their subjective interpretation of the event and minimizes the effects of the reality of a situation. The reality of a situation may be irrelevant to individual differences in explanatory style. Various populations, however, are not willing or not able to take the ASQ, and for them the CAVE technique is the only option. Interestingly, 'cheatability' does not seem to be an issue for the ASQ and is not a reason to turn to the CAVE technique. We have conducted studies that show that individuals who have an incentive to score well on the ASQ do not score better than those who do not have an incentive to score well (Seligman and Schulman, 1986; Schulman, Seligman and Amsterdam, 1987).

CAVEing creates enormous opportunities for research by allowing researchers to assess the explanatory style of populations that will not or cannot take questionnaires. Although much more labor-intensive than the ASQ, CAVEing allows the researcher to travel back in time, analyze naturally-occurring verbatim materials in a non-intrusive way and predict various, already documented phenomena, including achievement and mental and physical health. Longitudinal research that would normally take many years to complete is reduced to months and the cost is reduced.

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## APPENDIX

### *Guidelines for Extracting and Rating Spontaneous Explanations*

The following guidelines discuss how to extract event-explanation units and how to analyze the explanations along the three causal dimensions—internal vs external, stable vs unstable, and global vs specific.

Ideally, a minimum of 4 or 5 bad events with explanations are required to assess a style. There are two reasons for this. First, it is necessary to use multiple events to measure a cross-situational style. Second, in a comparison of studies that disconfirm with those that support the reformulated learned helplessness model, Peterson, Villanova and Raps (1985) found that the supporting studies systematically had larger sample sizes and more attributions per *S* than the disconfirming studies.

In much of our research with the CAVE technique, we have found that bad events with explanations are much more abundant than good events with explanations. Other researchers have found that individuals discuss bad events more than good events, that negative events have a greater impact than positive events (Zautra and Reich, 1983), and that the response to losses is more extreme than the response to gains (Tversky and Kahneman, 1981). Researchers have also reported a functional asymmetry in cognitions, such that negative cognitions, or the reduction in them, have a greater effect than positive cognitions on assertiveness (Schwartz and Gottman, 1976), coping with medical stress (Kendall, Williams, Pechacek, Graham, Shisslak and Herzoff, 1979) and recovery from psychological illness (Derry and Stone, 1979; Mavissakalian, Michelson, Greenwald, Kornblith and Greenwald, 1983). Such findings led Kendall (Kendall, 1982; Kendall and Hollon, 1981) to claim that the “power of nonnegative thinking” may be more potent than the power of positive thinking.

The dearth of good events, therefore, should not preclude investigation. Our past research has shown that the explanatory style for bad events is a more valid predictor of depressive deficits than the explanatory style for good events (Peterson and Seligman, 1984).

## EXTRACTING EVENT-EXPLANATION UNITS

An event is defined as any stimulus that occurs in an individual's environment or within that individual (e.g. thoughts or feelings) that has a good or bad effect from the individual's point of view. Events can be mental (e.g. I was afraid), social (e.g. I got a pay raise) or physical (e.g. I got in a car accident). Events should be unambiguously good or bad from the individual's point of view and may occur in the past, present or hypothetical future. Events that have good and bad elements, neutral events or events that do not affect the *S* should not be extracted. The explanation refers to the causal statement made by the *S* for the event. Only events which have explicit explanations are to be extracted.

To be extracted, the event and explanation must satisfy the following conditions:

(1) The event must be unambiguously good or bad from the *S*'s point of view. For example, deciding to get medical treatment or psychotherapy or researching one's disease may be a good policy in the extractor's estimation but is not necessarily a good event in the eyes of the *S*.

(2) The *S* must express his or her own explanation for that event, and not simply agree with or quote another person's (e.g. therapist or interviewers) explanation.

(3) There must be a clear causal relationship between the explanation and the event, and not simply a sequence of events that describe without explaining. The explanation of the event should not be just a proof or justification of the event. The explanation should clearly precede and cause the event.

The process begins by searching through any verbatim material, audiotaped, videotaped or written, for event-explanation units. Even if the word 'because' or its synonyms are missing, event-explanation units are acceptable if a clearly intended causal relationship can be inferred. Following are examples of acceptable event-explanation units:

E(event): I'm doing well in most of my classes  
 A(attribution): from now on, I'm determined to get the most out of school.  
 E: I got in a fight with a good friend  
 A: I had a tough day and was in a bad mood.  
 E: If I get admitted to Columbia  
 A: it would be due to my father's power as an alumnus. (Hypothetical events are acceptable.)

Following are examples of unacceptable extractions:

E: I realized I was in the high risk category for breast cancer  
 A: over the last few years I've been reading that a family history of breast cancer does matter. (This is not an unambiguously good or bad event. Although it is good to be aware of being at risk, this realization might also have a bad effect on the *S*.)  
 E: I haven't felt too anxious  
 A: because I feel so sick. (This is not clearly good or bad to the *S*, since there are good and bad elements in this unit.)  
 E: I had to drive up on the sidewalk  
 A: in order to avoid hitting the child on the street. (The *S* probably sees the averted accident as mitigating and justifying this bad event and therefore is not clearly bad in the eyes of the *S*.)  
 E: I must be getting sick  
 A: because I feel lethargic and have a sore throat. (The word 'because' does not always mean a cause is on the way. In this case, the *S* is giving proof or a definition of what she means by 'getting sick' and is not giving a cause.)

Ideally, the event and explanation should include enough information for the rater to be able to analyze all three causal dimensions. This may not always be possible but try to include all information pertinent to these dimensions. If the explanation contains so little information on the causal dimensions that it would require raters to do guesswork on two of the three dimensions, then it is best not to extract it.

Given the difficulty of rating extractions when they are taken out of context, it is important to add relevant contextual information to the event and explanation. The substance of the explanation, though, should be verbatim. This context is vital for the rater because the extraction is often unclear when taken out of context. Any contextual information should be in parentheses. For example:

E: I got it (accounting job)  
 A: I did an internship with him (company vice-president) for the last two summers.  
 E: He (husband) hasn't come in (to hospital) to visit me much.  
 A: He feels really uncomfortable in hospitals.

If one event has multiple explanations, then there should be as many events with explanations as there are explanations. For instance, the phrase, "I didn't do well on my exam because I didn't sleep well last night and I didn't study enough", should be broken into two extractions:

E: I didn't do well on my exam  
 A: because I didn't sleep well last night.  
 E: I didn't do well on my exam  
 A: I didn't study enough.

An explanation in one extraction may be an event for another extraction, or vice versa. For instance:

E: I haven't been sleeping well  
 A: because I'm worried about getting into a good graduate program.  
 E: I'm worried about getting into a good graduate program  
 A: my grades aren't that great.

When presenting the extractions to the raters, randomize the extractions within and between *Ss*. This is important so that the raters are not biased by previous ratings for the same *S* and do not fall into entrenched rating patterns. Also, raters occasionally disagree on whether the event is good or bad. Only those extractions for which the raters are unanimous are used.

Finally, if in doubt, throw it out. If you have any reasonable doubts about the extraction, do not extract it. Poor extractions only degrade the data.

## RATING THE EXTRACTIONS

As with the Attributional Style Questionnaire, ratings of the explanations are assigned to each of the three dimensions—internal vs external, stable vs unstable, and global vs specific—using a 7 point scale. Ratings range from 1 to 7 for each dimension, with 7 representing the most internal, stable and global explanations; and 1 for the most external, unstable and specific explanations. For all of these dimensions the rater is attempting to rate the *S*'s perception of the internality, stability and globality of the cause.

If there is insufficient information to assign a rating to any of the dimensions, then assign a 4, so as not to skew that rating. Be careful not to let your own subjective judgments creep into the rating if information is lacking. Examine the grammatical nuances and take each phrase's rich context into account. The nuances of an explanation may help in rating such ambiguous and difficult to rate causes as age, sickness, injury and social classification.

### *The internal vs external scale*

The 7 point scale for this dimension is divided into three regions: 1, if the individual attributes cause to someone or something external to self; 7, if the individual attributes cause to any behavioral, physical or mental characteristic about the self; 2–6, if the individual attributes the cause of an event to some combination of self and other. This scale is not directly a measure of blame, credit, responsibility-taking or control, rather it is defined by self-caused vs other-caused, internal vs external.

Examples of a 1 rating include explaining an event by another person's actions, the difficulty or ease of a task, time or the environment (such as a natural disaster, circumstances or the weather). Examples of a 7 rating include references to the individual's own personality or physical traits, behavior, decisions, ability or inability, motivation, knowledge, disability, illness, injury, age, and social or political classifications (such as widow, conservative, etc.). Ratings in the 2–6 range apply to explanations in which the cause shares both internal and external elements and is an interaction between self and another person or between self and environment. Following are some examples:

- E: I did well on the test  
A: because it was easy. Rating = 1.  
E: I didn't get the job  
A: because they discriminate. Rating = 1.  
E: I'm having problems with a friend  
A: because she can't accept my perfectionism. Rating = 2 or 3.  
E: We're getting a divorce  
A: we're just not compatible. Rating = 4.  
E: I'm aphasic  
A: when I get overheated. Rating = 4.  
E: I need surgery on my knee  
A: it's getting worse from jogging. Rating = 4.  
E: I did well on the test  
A: because I studied hard. Rating = 7.  
E: I didn't get the job  
A: because I'm a woman. Rating = 7.

### *The stable vs unstable scale*

This dimension refers to the persistence in time of a cause, whether the cause of the event is chronic (stable) vs temporary (unstable). It is important to keep in mind that we are assessing the stability of the cause, not the stability of the event. So, the question to ask is, Given the event, how long-lasting or transient is the cause? It is also helpful to ask yourself if the cause can be changed or modified. Keep in mind the wording of the stability question on the Attributional Style Questionnaire:

In the future when this event occurs, will this cause again be present?

Will never again be present	1	2	3	4	5	6	7	Will always be present
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Since many events are unique and may never happen again, rating the stability of the event will add nothing to our understanding of an individual's style of explaining events. So, we rate the stability of the cause given that the event, unique or otherwise, has occurred. Conversely, when rating the globality of the cause, hold time constant. So, we rate the globality of the cause at a point in time. Even though the stable and global dimensions are significantly intercorrelated and probably often overlap in reality, it is important to rate each of these two dimensions independently of the other. Upcoming examples will illustrate these points.

There are four interacting criteria that help to determine the rating of stability:

(1) *The tense of the cause.* If the cause of an event is in the past tense, then the rating would tend to be less stable than if the cause is in the present or progressive tense.

(2) *The probability of future re-occurrence of the cause.* A cause that is unlikely to occur again would be less stable than a cause that is likely to occur again.

(3) *An intermittent vs continuous cause.* A cause that is intermittent, such as the weather, would be less stable than a continuous cause, such as a physical trait.

(4) *A characterological vs behavioral cause.* Explaining an event by a character trait (e.g. I am smart, lazy, decisive) is more stable than attributing an event to a behavior (e.g. I did a smart thing, I made a bad decision). Following are some examples:

- E: I can't attend the conference  
 A: because I have to go to a wedding. Rating = 1. This cause is in the present tense but is unlikely to occur again.
- E: I was depressed  
 A: when my grandmother died. Rating = 2. This cause occurred in the past, cannot occur again but may have some ongoing influence.
- E: I have trouble sleeping  
 A: When it's hot. Rating = 3. This cause is likely to occur again but only intermittently.
- E: My marriage is falling apart.  
 A: Getting married so young was poor judgment on my part. Rating = 3. This cause is in the past tense, has a small probability of future occurrence and is behavioral rather than characterological.
- E: I'm afraid to go out when it's dark  
 A: since I was mugged. Rating = 4. This cause occurred in the past, has a small probability of a future occurrence but may exert an ongoing influence on behavior.
- E: I can't restrain my appetite  
 A: when I see someone else eating. Rating = 4. This cause is in the present tense, is likely to occur again and is intermittent.
- E: It's difficult for me to express anger.  
 A: That's just the way I was raised. Rating = 5. This cause occurred in the past but definitely exerts an ongoing influence on behavior.
- E: I'm not doing well in school  
 A: because I'm such a lazy person. Rating = 5 or 6. This cause is in the present tense, will probably occur again (but may change) and is characterological.
- E: I didn't get the job  
 A: because I'm a woman (or blind or intelligent, etc.). Rating = 7. This cause is unalterable and continuous.

#### *The global vs specific scale*

This dimension measures the extent to which a cause affects an individual's whole life (global) or just a few areas (specific). This dimension is often the most difficult to rate because there is rarely enough information in the extraction to indicate how widespread the effects of the cause are and what the important domains of an individual's life is. For example, poor maths abilities would have a greater effect on an accountant than a painter, quality of friendships would tend to be more important to a socially oriented person than a workaholic, and a sprained ankle would have a greater impact for a professional skater than a computer programmer. In the absence of such intimate knowledge, it is useful to think of how a cause impacts the broad scope of an 'average' individual's life in terms of two major categories—*achievement* and *affiliation*—each comprised of numerous subcategories. Clearly, this is an artificial distinction and is neither exclusive nor exhaustive, but it is heuristic and helps keep the rater from projecting her own bias into the globality rating.

Achievement, for instance, would include occupational or academic success, accumulation of knowledge or skills, sense of individuality or independence, economic or social status. Affiliation includes intimate relationships, sense of belongingness, sex, play, marital or family health. These are just a few examples. Causes could affect just one situation, part of one category, or all of both categories (such as mental or physical health), all of one category, or all of both categories.

It is often helpful to look to the event to judge the globality of the cause, since the event is one effect in the universe of possible effects. Do not, however, rate only the effects mentioned in the event, since the cause may affect more than what is stated in the event. Primarily, rate the globality of the cause and only secondarily look at the event as one of the effects of the cause. Following are some examples:

- E: I got a speeding ticket  
 A: I guess the cop had to fill his quota for the day. Rating = 1. This cause affects one situation.
- E: My relationships are handicapped  
 A: by my fear of spontaneity. Rating = 2 or 3. This cause affects part of the affiliative category and possibly part of the achievement category.
- E: My body image has gotten worse  
 A: since my breast was removed. Rating = 4 or 5. This cause affects parts of both categories.
- E: I've had to cut back on my level of activity.  
 A: since my heart attack. Rating = 4 or 5. This cause affects parts of both categories.
- E: I've lost all zest. I've felt devastated  
 A: since my husband died. Rating = 6 or 7. Most of both categories are affected by this cause.