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ABSTRACT

The objective of this study was to empirically validate West Germans' classifications of 11 attributions according to dimensions of locus, stability, controllability, predictability, and globality. The West German sample was then compared to an American sample. It is believed that West Germans and Americans develop different beliefs about the causes and consequences of intellectual functioning and different reactions to the presence of authority. The samples included 115 male and 135 female Germans and 100 male and 100 female Americans, most of whom were college students. Attributions selected included: mood, skill, knowledge, chance, effort, competence, help, ability, task, bias, and luck. These 11 attributions obtained from previous research were placed on separate pages of a questionnaire; each attribution was followed by five 7-point scales on five dimensions: (1) external-internal; (2) stable-unstable; (3) predictable-unpredictable; (4) controllable-uncontrollable; and (5) specific-general. Two sets of 3-way analyses of variance with one repeated measure were performed. Results show that the semantic meaning of attributions varies somewhat between Americans and Germans. This variation has implications for educational settings involving multicultural and multiethnic populations and for motivational strategies used by students. Two data tables are included. (TJH)

Semantic Differential Placement of Attributions and Dimensions: A German Comparison

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Semantic Differential Placement of Attributions and Dimensions: A German Comparison

Objective: The objective of this study was to empirically validate subjects' classification of 11 attributions (mood, skill, knowledge, chance, effort, competence, help, ability, task, bias, luck) according to dimensions of locus, stability, controllability, predictability, and globality in a West German sample and compare this to a U. S. sample (Chandler & Spies, 1984).

This was done to determine if the meaning ascribed to the various attributions was a function of the cultural context. Weimer (1983) has suggested that this may be the case: "A basic error exhibited in attribution research...is that the a priori categorication of causes is accepted without considering the situation as perceived by the subject" (p. 535).

Theoretical Framework: Although a considerable research literature has emerged documenting cross-cultural differences in attributional assignments for achievement and affiliation, success and failure (Chandler et al, 1981a, 1981b, 1983; Segall, 1986), no study has documented the connotation of these attributions across cultures. For example, we know that the Japanese do not attribute achievement success to ability or failure to lack of ability (Chandler, et al, 1981); we do not know the meaning and placement of ability within the five dimensions cited. This connotation could account for the attributional assignment. One cannot assume that the basic properties of causality are pancultural.

As part of a larger cross-cultural study, West Germany was selected in part because Galtung (1981) hypothesized that German

children, in contrast to Americans, develop different beliefs about the causes and consequences of intellectual functioning. Also, with a historical child rearing practice of blind obedience to authority (perceived as external and uncontrollable), West German college students and adults may give us an interesting cross-cultural contrast in the meanings attributions hold for them. This is suggested by the Krampen and Weiberg (1981) study in which Germans, in contrast to Americans and Japanese, manifested more powerlessness.

Method: Eleven attributions obtained from previous research (Chandler, Spies, & Wolf, 1982; Weiner, 1979) were placed on separate pages of a questionnaire, followed by a random ordering of five 7-point scales on the following dimensions: external-internal, stable (unchangeable)-unstable (changeable), predictable-unpredictable, controllable-uncontrollable and specific-general. Each participant received supplemental instructions explaining each of the dimensions.

Data Source: The sample of 250 subjects (115 males and 135 females) consisted of 50 undergraduate law and economics majors; 50 undergraduates in diverse fields (excluding law, economics and psychology; 50 upperclass psychology students; 50 freshmen psychology students; 50 naive lay individuals (over 35 years of age) who had never attended a college or university.

The U. S. sample consisted of 50 undergraduate education majors, 50 graduate education majors, and 50 undergraduate psychology students (equally divided between males and females) plus a samole of 50 naive lay individuals (over 35 years of age.

equally divided by gender) who had never attended a college or university.

Results: Two sets of three-way analyses of variance with one repeated measure were performed. In each set the two nonrepeated factors were group and sex, and for one set, the dimensions (5) were the repeated measure and the attributions (11) were the dependent variables. In the other set, the attributions were the repeated measure and the dimensions, the dependent variables. After we obtained analyses of variance results using the .01 significant level, the Tukey (A) method of multiple comparison, was employed, also using .01 as the significance level. The .01 significance was selected because of the number of hypotheses tested within the same experiment.

For the German group, considering the attributions as dependent variables, mood, chance, effort, task and luck had significant dimension and groups X dimension F's. For skill, knowledge and ability, dimension only was significant. For competence, dimension and sex X group X discussion were significant. For help, dimension, sex X dimension, group X dimension and sex X group X dimension were significant. For bias, group, sex X group, dimension, group X dimension and sex X group X dimension were significant. Thus help and bias showed the most diversity of placement.

In total comparison with the total American sample, there were a number of significant differences. For example, on the internality dimension there were 8 out of 11 significant differences--the most among the five dimensions. Of these,

Germans tend to perceive the meaning of 6 (skill, effort, help, ability, task, luck) of these as being more internal than Americans do. Only mood and bias were regarded as more internal by Americans. On the stability dimension, two (mood, task) significant differences indicated that Americans consider these more stable (unchangeable) than Germans. Of the five (mood, chance, help, bias, luck) attributions, only with luck did the Germans consider this more controllable than Americans. Germans considered that mood, chance, help, and luck were more situation specific than Americans, who thought that skill was more specific. Finally, Americans thought chance was more predictable than did the Germans. In summary, there were 21 of 55 significant differences.

If we compare the results for the total groups by attribution and consider a mean of at least one point from neutral to indicate placement toward one end of a continuum, we find mood was characterized as internal and unstable by Americans and unstable and specific by Germans. Effort was rated unstable and controllable by Americans, and internal, predictable, unstable, controllable and specific by Germans. Help was classified as controllable by Americans and specific by Germans. Ability was not classified on any dimension by Americans but internal by Germans. Task was considered controllable by Americans and Germans while bias was not placed on any dimensions. Luck was viewed as unpredictable, unstable and uncontrollable by Americans and Germans. These were the attributions discussed by Weiner. We added several attributions to this group. Chance was rated as

external as well as unpredictable, unstable and uncontrollable as was luck. The placements of skill, knowledge and competence were compared with those of ability. Skill was seen as controllable and specific by Americans and internal and controllable by Germans. Knowledge was internal, unstable and controllable for Americans and internal and controllable for Germans. Competence was rated as internal and controllable for both groups.

If we consider differences between the two countries, mood is considered more internal, stable and controllable and less specific by Americans than Germans. Effort is more internal for Germans than for Americans. Help is less internal and specific and more controllable for Americans. Task is less internal and more stable for Americans. Bias is more internal and controllable for Americans. Luck is more external, less controllable and less controllable for Americans. Skill was less internal and more specific for Americans while knowledge and competence did not differ. Chance was seen as more controllable, more predictable and less specific by Americans.

The only difference between chance and luck was with respect to internality where chance was cited less internal than luck.

For the set, ability, knowledge, competence and skill, knowledge was rated more controllable than ability and knowledge was less specific than ability and competence.

In no case was a particular attribution placed in opposite direction for the two countries.

Examining the significant differences across the attributions, one finds the greatest consistency between Germans

and Americans on the following attributions: knowledge, effort, competence and ability.

The Spearman rank correlations were computed among the placements of the primary seven attributions on the five dimensions for both the German and American samples. The highest correlation for the Germans was between predictable and controllable (.93) stable and specific were related to -.70. All other coefficients were .50 or less. For the American sample, predictable and stable were related .75. All other correlation were .57 or less. Relating the dimensions between groups, predictable (.86) stable, stable (.79), and controllable (.86), were highly related. The other two were not.

With dimensions as the dependent variables, the following results were obtained. For all five dimensions, there was a significant attribution main effect. For the dimension predictable, there was a significant sex X group interaction and there was a significant group X attribution interaction for all dimensions except general. There were no sex differences nor any sex X group X attribution interaction.

Importance of Study: The semantic meaning of attributions vary somewhat between Americans and Germans. Obviously, the placement of a causal ascription is contingent upon the subjective meaning of that cause. That subjective meaning may be culturally influenced. Not only does this have implications for an educational setting which is multi-cultural/ethnic, it also has direct implications for motivational strategies employed by students. For example, Germans clearly perceive that ability is

less changeable than effort, whereas the distinction was not as pronounced for Americans. This has implications for change in expectancy for success or failure. Even if a student presumes that ability determines performance, if s/he perceives ability as stable, that student is not very likely to change the expectancy. If the teacher ascribes the success/failure to effort or lack of it, then student and teacher may be on a collision course.

Just as the outcome, perceived success or failure, may be too simplistic an explanation, causal attribution may also be too simplistic and even misleading if we do not know how an individual or cultural/ethnic group may perceive the meaning of that attribution across the various dimensions.

Table 1
Means and Standard Deviations of Subjects' Ratings of the Attributions on the Five Dimensions (German)

	Internal		Predictable		Stable		Controllable		Specific	
Attribution	M	SD	M	SD	M	SD	M	SD	M	SD
Mood	4.72	1.50	3.47	1.55	2.00	1.33	3.95	1.59	5.23	1.65
Skill	5.12	1.49	4.68	1.72	4.03	1.88	5.33	1.33	4.33	1.88
Knowledge	5.02	1.65	4.63	1.83	3.27	2.05	5.85	1.27	4.02	2.00
Chance	2.64	1.76	1.70	1.39	2.58	2.06	1.54	1.09	4.68	2.29
Effort	5.17	1.47	5.08	1.50	2.53	2.06	5.74	1.42	5.00	1.72
Competence	5.00	1.62	4.92	1.58	3.47	1.78	5.22	1.42	4.86	1.78
Help	4.47	1.74	3.87	1.80	3.05	1.69	4.61	1.87	5.13	1.73
Ability	5.32	1.42	4.69	1.62	3.89	1.85	4.86	1.65	4.61	1.81
Task	3.68	1.72	4.47	1.74	3.17	1.70	5.06	1.64	4.70	1.83
Bias	3.19	1.78	3.85	1.89	3.36	1.82	3.07	1.87	4.18	1.99
Luck	4.11	2.05	2.23	1.56	2.16	1.63	2.39	1.72	4.70	2.13

TAble 2
Means and Standard Deviations of Subjects'Ratings of the Attributions on the Five Dimensions (Americans)

	Internal		Predictable		Stable		Controllable		Specific	
Attribution	M	SD	M	SD	M	SD	M	SD	M	SD
Mood	5.20	1.14	3.70	1.57	2.90	1.48	4.60	1.43	4.58	1.56
Skill	4.16	1.53	4.81	1.60	3.97	1.76	5.74	1.11	5.26	1.49
Knowledge	5.12	1.44	4.22	1.62	2.92	1.73	5.57	1.29	4.12	1.73
Chance	2.96	1.44	2.49	1.52	2.64	1.67	2.50	1.59	3.70	1.91
Effort	4.70	1.67	4.82	1.66	2.88	1.75	5.60	1.44	4.72	1.72
Competence	5.03	1.58	4.73	1.47	3.89	1.65	5.20	1.24	4.74	1.64
Help	3.74	1.63	4.19	1.73	3.31	1.55	5.13	1.50	4.40	1.86
Ability	4.68	1.46	4.90	1.61	3.62	1.84	4.91	1.52	4.55	1.70
Task	3.12	1.48	4.83	1.52	3.88	1.65	5.08	1.52	4.78	1.72
Bias	1.92	1.64	4.26	1.66	3.56	1.86	4.76	1.59	4.60	1.80
Luck	3.18	1.77	1.90	1.21	2.59	1.92	1.96	1.29	3.60	2.06