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ABSTRACT

The classifications of 11 attributions according to dimensions of locus, stability, controllability, predictability, and globality by participants in 7 countries (China, France, Germany, Hong Kong, Israel, Spain, and the United States) were compared in a cross-cultural study. The attributions were: (1) bias; (2) help; (3) luck; (4) ability; (5) competence; (6) effort; (7) task; (8) chance; (9) knowledge; (10) skill; and (11) mood. It was hypothesized that different cultures would assign different meanings to attributions according to the dimensions. Participants from the 7 countries were 1,145 undergraduate and graduate students and lay individuals (over age 35 with no formal education beyond high school). Nine of the 11 attributions could be validly compared, but bias and competence were not comparable across the countries. Subjects from all countries perceived ability, mood, skill, and knowledge as internal. All countries except Israel (neutral position) perceived chance and task as external. In all countries, effort was seen as controllable. Israelis were neutral with regard to skill and knowledge, but other countries perceived these attributions as controllable. Luck was generally perceived as uncontrollable, with luck and chance seen as unstable. Average values were seldom found at the extremes. The most significant differences were found for Israel, and these were findings that could be reflected in a greater sense of control of one's destiny and more perceived power. Five tables summarize study findings. (Contains 9 references.) (SLD)

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Semantic Differential Comparisons of Attributions and Dimensions Among Seven Nations

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Objectives

The purpose of this study was to compare participants' classification of 11 attributions (bias, help, luck, ability, competence, effort, task, chance, knowledge, skill, mood) according to dimensions of locus, stability, controllability, predictability, and globality in comparable samples across seven nations (China, France, Germany, Hong Kong, Israel, Spain, and U.S.). It was hypothesized that different cultures will assign different meaning to attributions according to the dimensions. In Kagiteibasi and Berry's (1989) cross-cultural review of the attributional literature, "two key issues are (a) whether the basic attribution paradigm works cross-culturally, and (b) what factors are attended to in making attributions across cultures" (p. 501). This study attempts to address one aspect of the issues. Evidence from cross-national comparisons of courses for success and failure in an achievement context suggest that there are indeed differences that may be a function of national or cultural orientation (Chandler et al., 1981). Maehr (1980) has suggested that achievement may be viewed differently and pursued differently. If indeed the causal attributional assignments in the research literature have an American ethnocentric bias, then it is essential that the meaning represented by national/cultural variations be identified to place the U.S. attributional literature in a wider context.

Theoretical Framework

Contemporary attribution theory has evolved from Heider's (1958) "common sense or naive psychology" which examines "the cause-effect analyses of behavior made by the 'man in the street' . . . to determine much of our understanding of and reaction to our surroundings" (p. 16). Beliefs about the causes of success and failure, known as causal attributions, mediate between the perceptions of an achievement task and the final performance. Such attributions determine the motivation to try harder in the future. Low expectancy of success and helplessness, associated with lack of ability ascriptions, are assumed to retard achievement strivings.

Prior to Chandler and Spies' (1984) empirical validation of subjects' classifications of attributions according to dimensions, the attribution research literature accepted a priori assignment of the causal attribution to various extreme points. Earlier research (Chandler, Spies, & Wolf, 1982) suggested that some of the attributions were confounded with other connotations, e.g., ability was perceived as knowledge, skill, or competence. There were additional attributions and dimensions that needed to be examined. Causal attributions for success or failure help to explain subsequent motivation or lack of it. But without knowing the meaning of the attribution, the assignment becomes meaningless. For example, evidence (Chandler, Shama, Wolf, & Planchard, 1981; U.S. Department of Education, 1987) suggests that the Japanese attribute success to effort but not ability. If ability is perceived as uncontrollable and unchangeable, then one will act differently than if it is considered as controllable and changeable.

Maehr (1980) and Bond (1986) suggest that attributions may have different connotations in different cultures. Contrasts in cultural heritage should translate into different semantic interpretation of the perceived causalities. The Western concept of the autonomous individual is quite foreign, e.g., to the Chinese. This variation has implications for educational settings involving multicultural and multiethnic populations and for motivational strategies used by students. By examining semantic underpinnings of attributional assignments from a cross-cultural perspective we can understand the meaning of attributions for success and failure. Since attribution theory makes little if any provision for cultural factors, it is essential that cross-cultural comparisons be made.

Paper presented at American Educational Research Association Convention in Atlanta on April 15, 1993.

Method

Eleven attributions (mood, skill, knowledge, chance, effort, competence, help, ability, task, bias, luck) which were generated from previous pilot studies and a review of research literature were placed randomly in a questionnaire format. Each of these attributions was placed on a separate page of the questionnaire, followed by a random ordering of five 7-point scales on the following dimensions: external-internal, global-specific (to a particular situation), uncontrollable-controllable, stable (unchangeable)-unstable (changeable), and predictable-unpredictable. The questionnaire directions were as follows: "We are trying to determine what certain words mean to people. Here is a series of words which you are to rate on a set of 7-point scales. Circle the numeral of your choice. Remember, that there are not right or wrong answers. We are interested in knowing what you think or feel." A sample was provided and explained. In addition, each participant received a sheet of supplemental instructions that explained each of the dimensions. The entire questionnaire and instructions were translated into the language of the country and then back translated by a second person fluent in both English and the specific foreign language.

Data Source

The participants were volunteers from Spain (n=50), France (n=177), U.S. (n=100), Israel (n=205), Germany (n=249), China (n=185), and Hong Kong (n=179). There were a total of 1146 individuals balanced to the extent possible across several demographics: gender, undergraduate, graduates, and lay individuals (over age 35 with no formal education beyond high school). The students were enrolled in public universities in the various countries.

Results

Of the 11 attributions, nine of them proved to be validly capable of being compared across countries. Bias and competence were attributions that were not comparable terms across the countries. Two-way analyses of variables were used for country and attribution. Since the country x attribution interactions were significant, the simple effects of country and attributions were tested (.01) using the Tukey multiple comparison method. Israel was most different from all the other countries. Although there were cross-national significant differences across these nine attributions for all five dimensions, time and space preclude a complete description of the extensive results. Hence, only highlights follow.

Although the absolute limits ranged from 1 to 7 on a Likert scale the means of various countries never were in the extremes (i.e., 1 or 7) of the continuum. However, there were some significant differences (.01). On effort, the U.S. (M = 6.02) and France (M = 5.74) were significantly higher in internality than Israel (M = 3.89). For luck Israel (M = 5.37) was significantly higher in internality than all other countries, all of whom (except Germany in neutral range) were in the external range. For help, Spain (M = 5.18) and U.S. (M = 5.14) were significantly higher in internality than China (M = 3.60) which was more external. All countries perceived ability as internal. All countries perceived mood, skill, and knowledge as internal. All countries except Israel (neutral position) perceived chance and task as external.

For the controllable dimension, all countries perceived effort as controllable (U.S. significantly higher with M = 6.09), as well as ability and task (with Spain significantly higher with M = 5.80). For skill and knowledge, Israel was significantly in the neutral range (N = 4.14; 4.19) whereas all other countries considered these as controllable. Israel was also significantly neutral (M = 4.36) for perceiving chance but all other countries believed chance to be uncontrollable. With the exception of China (M = 3.08), all other countries perceived help as controllable. For mood, the U.S. (M = 4.84) significantly perceived it as controllable but the others thought it uncontrollable. Luck was perceived as uncontrollable by all except Israel (M = 4.70) that thought it somewhat controllable.

The stable-unstable dimension refers to the degree one perceives that something is changeable (unstable) or unchangeable (stable). All countries perceived luck and chance as unstable though Israel was significantly lower, i.e., less unstable (M = 4.62) on chance. On help, all countries perceived that it was slightly unstable with no significant differences. Although all countries perceived that effort was unstable, France (M = 4.25) and China (M = 4.35) were significantly lower and Spain (M = 6.26) significantly higher. In contrast, ability was perceived as slightly unstable by U.S. (M = 4.60), Hong Kong (M = 4.45), and neutral by Germany (M = 4.11) and stable by all others. The perceptions for task

varied from neutral for China, France, and Hong Kong to Israel (M = 5.45) which was significantly higher in being unstable.

In terms of the predictability dimension, all countries perceived chance and luck as unpredictable, though Israel significantly borders on the neutral (M = 4.28) for luck, and all perceived ability as predictable. Only Spain (M = 5.74) and Israel (M = 4.94) significantly think that effort is unpredictable. Mood is perceived as unpredictable by all countries except Israel (M = 2.95). Israel significantly perceives skill (M = 4.79), knowledge (M = 5.16), help (M = 5.00), and task (M = 5.95) as unpredictable in contrast to all the other countries.

The global specific dimension produced only one attribution (luck) which was percieved by all countries as specific (to a particular situation). On all the other attributions the countries ranged the gamut, however, Israel tended to be significantly diffeent from most or all of the others. For skill, Israel significantly perceived this as general (M = 2.87), Hong Kong was neutral but others perceived this as specific. Knowledge is significantly perceived as general (M = 2.50) and either neutral or also general (though less so than Israel). Israel rated chance as significantly general (M = 3.45) with Spain, France, and the U.S. in the same direction and the rest toward specific. For effort, Israel significantly perceived this as general (M = 2.82) though less so for China (M = 3.80) and Hong Kong (M = 3.27). Germany ranked effort as highest for specific (M = 5.00). Israel was also significantly the highest (M = 5.79) in perceiving ability as specific to particular situations. Except for China and Hong Kong (which were neutral), all others perceived ability as specific. For help, Germany was significantly the highest (M = 5.79) and hence perceived this as specific. Others were general or neutral. Israel was significantly the lowest (M = 2.35) for task perceiving it to be general, as China and Hong Kong agreed. Both Israel (M = 5.34) and Germany (M = 5.22) perceived signi-ficantly higher that mood is specific to a particular situation. Only Spain (M = 3.62) perceived it was general.

Importance of Study

In contrast to what one might expect from the research literature on attributions, seldom were there average values at the extremes. This finding may be a function of a generalized tendency not to rate at extremes, or it may reflect the fact that few participants perceived the attributions as strongly in either direction. This could be a function of the specificity of each attribution. In the majority of the cases where there was a significant difference between the other countries and Israel, the increased internality and controllability on the part of the Israeli sample suggest that this could be reflected in a greater sense of control of one's destiny and more perceived power. If any attribution (e.g., ability or effort) is perceived as the major causal factor in performance, this can have serious implications for change in expectancy of success or failure if the attribution is perceived as more or less controllable, more or less internal, etc. How a specific culture views the meaning of an attrribution may help us to understand why certain attributions are used or not and in what way they are used.

Considering all of the groups, the attributions of skill, knowledge, and luck manifested the largest number of significant differences between Israel and the other countries. The accomplishments of Israel, in view of the odds, would attest to the importance of skill and knowledge. Luck may be reflected as an explanation for somehow managing to do the miraculous in spite of or because of war, inflation, and terroism. The dimension of internality, in comparison to all other dimensions, was more frequently different between Israel and many of the other countries, suggesting that internality, a concomitant of mastery, is significantly different in Israel's society. The conflict between the will of God and the pride of the Jewish people--the struggle between faith and reason is more prevalent in Israel because of the preoccupation with survival. With Israel's forces locked in what seems to be perpetual conflict, danger becomes a way of life.

Table 1

Semantic Differential Scores of Attributions for Each Country for the Internality/Externality Dimension[a]

	Attributions																	
	Mood		Skill		Knowledge		Chance		Effort		Help		Ability		Task		Luck	
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Spain	5.96	1.21	5.80	1.23	5.70	1.64	1.96	1.41	4.66	2.02	5.18	1.94	6.22	.89	4.68	1.86	2.36	1.37
France	5.12	1.77	5.23	1.65	4.78	1.94	2.61	1.78	5.74	1.41	4.35	1.87	5.68	1.42	3.90	1.75	3.57	1.89
U.S.A.	5.93	1.13	5.39	1.10	5.67	1.32	2.57	1.44	6.02	1.05	5.15	1.57	5.68	1.02	3.89	1.73	3.07	1.82
Israel	5.07	1.75	4.48	1.65	4.02	1.69	4.43	1.54	3.90	1.61	4.34	1.54	4.92	1.96	4.55	1.92	5.38	1.34
Germany	4.73	1.50	5.14	1.50	5.04	1.65	2.63	1.76	5.18	1.47	4.47	1.76	5.32	1.42	3.68	1.72	4.11	2.06
China	5.20	1.66	4.73	1.59	4.31	1.78	2.45	1.43	5.22	1.43	3.61	1.83	5.04	1.45	3.01	1.40	2.59	1.56
Hong Kong	5.29	1.63	4.51	1.77	4.67	1.87	3.11	1 60	5.24	1.67	4.16	1.70	5.17	1.34	3.68	1.62	2.65	1.46

[a]The higher the numerical score the higher the internality.

Table 2

Semantic Differential Scores of Attributions for Each Country for the Controllable/Uncontrollable Dimension*

	Attributions																	
	Mood		Skill		Knowledge		Chance		Effort		Help		Ability		Task		Luck	
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Spain	3.86	1.71	5.78	1.18	6.00	.93	1.84	1.32	4.44	1.96	5.58	1.76	5.94	.79	5.80	1.23	1.98	1.32
France	4.23	1.82	5.98	1.20	5.99	1.13	2.11	1.58	5.62	1.31	5.28	1.62	5.50	1.43	5.35	1.43	3.05	1.78
U.S.A.	4.84	1.52	5.76	1.02	5.83	1.24	2.33	1.48	6.10	.88	5.73	1.38	5.29	1.34	4.97	1.63	2.46	1.65
Israel	4.14	1.93	4.14	1.93	4.20	1.93	4.36	1.70	4.63	1.75	4.93	1.71	4.60	2.12	4.45	1.92	4.70	1.85
Germany	3.59	1.59	5.55	1.34	5.85	1.27	1.54	1.09	5.74	1.42	4.61	1.87	4.86	1.64	5.07	1.64	2.38	1.72
China	3.91	1.76	5.43	1.42	5.09	1.69	2.43	1.72	5.23	1.45	3.09	1.72	4.32	1.71	4.61	1.61	2.34	1.51
Hong Kong	4.38	1.65	5.44	1.55	5.11	1.78	3.33	1.82	5.56	1.36	4.99	1.79	4.91	1.57	4.72	1.66	2.20	1.41

*The higher the numerical score the more controllable.

Table 3

Semantic Differential Scores of Attributions for Each Country for the Stability/Unstability Dimension*

	Attributions																	
	Mood		Skill		Knowledge		Chance		Effort		Help		Ability		Task		Luck	
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Spain	5.26	1.81	3.38	1.86	4.28	2.31	6.26	1.16	6.26	.78	4.52	2.11	2.92	1.76	4.60	1.73	6.32	1.13
France	5.20	1.68	2.73	1.62	3.32	1.93	5.94	1.53	4.25	1.81	4.10	1.86	3.15	1.74	3.78	1.66	5.48	1.69
U.S.A.	5.80	1.44	4.86	1.65	5.56	1.62	5.52	1.83	5.37	1.63	4.78	1.55	4.61	1.80	4.50	1.58	5.36	1.82
Israel	3.32	1.90	4.86	1.81	5.82	1.16	4.63	1.64	5.26	1.36	4.26	1.67	2.80	1.68	5.45	1.46	5.61	1.34
Germany	6.01	1.34	4.01	1.93	4.72	2.06	5.42	2.06	5.46	1.44	4.94	1.70	4.11	1.84	4.82	1.71	5.84	1.62
China	4.65	1.75	2.83	1.61	3.44	1.96	5.97	1.29	4.35	1.76	4.22	1.71	3.22	1.70	3.94	1.68	5.77	1.22
Hong Kong	4.86	1.86	3.93	1.96	4.38	2.00	4.89	1.90	4.74	1.85	4.44	1.58	4.45	1.75	4.27	1.68	5.07	1.86

*The higher the numerical score the more unstable (changeable).

Table 4

Semantic Differential Scores of Attributions for Each Country for the Predictability/Unpredictability Dimension*

	Attributions																	
	Mood		Skill		Knowledge		Chance		Effort		Help		Ability		Task		Luck	
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Spain	4.48	2.00	2.84	1.41	2.70	1.62	6.12	1.42	5.74	1.38	3.34	1.86	2.22	1.08	3.04	1.29	6.20	1.37
France	4.65	1.86	2.52	1.47	2.80	1.63	5.90	1.59	2.98	1.66	3.31	1.76	2.57	1.53	3.18	1.61	5.30	1.67
U.S.A.	4.53	1.79	2.93	1.49	3.37	1.73	5.60	1.53	3.65	1.72	3.68	1.66	2.70	1.39	3.59	1.48	5.97	1.46
Israel	2.95	1.73	4.79	1.65	5.17	1.38	5.13	1.57	4.94	1.43	5.00	1.41	2.59	1.59	5.96	1.23	4.29	1.55
Germany	4.54	1.57	3.36	1.79	3.37	1.82	6.30	1.38	2.92	1.50	4.15	1.81	3.32	1.62	3.52	1.74	5.77	1.58
China	4.71	1.70	3.34	1.53	4.06	1.86	5.46	1.54	3.83	1.70	3.78	1.67	3.42	1.78	3.78	1.56	5.68	1.54
Hong Kong	4.79	1.74	3.32	1.88	3.55	1.90	5.12	1.62	3.24	1.78	3.36	1.63	2.74	1.56	3.98	1.65	5.82	1.44

*The higher the numerical score the more unpredictable.

Table 5

Semantic Differential Scores of Attributions for Each Country for the Specific/Global Dimension[a]

	Attributions																	
	Mood		Skill		Knowledge		Chance		Effort		Help		Ability		Task		Luck	
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Spain	3.62	1.89	4.72	1.93	3.22	1.82	3.66	2.35	4.08	1.87	3.60	2.14	4.80	1.86	4.22	2.00	4.72	2.23
France	4.90	2.00	4.66	2.07	4.03	2.18	3.75	2.31	4.69	1.93	4.14	1.98	4.65	2.19	4.00	1.85	4.31	2.16
U.S.A.	4.75	1.76	5.04	1.72	3.96	1.87	3.83	2.04	4.52	1.84	4.02	2.00	4.51	1.89	4.82	1.57	4.20	2.16
Israel	5.35	1.67	2.87	1.60	2.53	1.37	3.45	1.53	2.82	1.46	3.68	1.70	5.80	1.56	2.36	1.38	4.56	1.74
Germany	5.23	1.65	4.35	1.90	4.01	2.00	4.66	2.29	5.01	1.72	5.14	1.72	4.61	1.81	4.70	1.83	4.68	2.14
China	4.16	1.70	4.31	1.79	3.12	1.66	4.80	1.89	3.81	1.59	3.51	1.71	3.99	1.69	3.81	1.57	4.90	1.80
Hong Kong	4.19	1.78	3.92	1.93	3.95	1.87	4.43	1.82	3.28	1.76	3.61	1.87	4.03	1.70	3.55	1.60	4.62	1.90

[a]The higher the numerical score the more specific.

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