

ACTOR-OBSERVER ATTRIBUTIONS FOR FAILURE TO CONTROL PHYSICAL CONDITIONS

Evelyn Perloff and Patricia Bohachick

In the actor-observer attribution paradigm Jones and Nisbett (1972) proposed that the causal explanation or attribution made by individuals (actors) for their own behaviour differs from the explanation that others (observers) make of that behaviour. That is, it has been theorized that actors tend to attribute their behaviour to situational demands or events (job pressures, legal problems, social relations, etc.), whereas observers attribute the same behaviour to elements in the actor's disposition (personality, attitudes, physical make up, etc.). It seemed to us that the Jones and Nisbett position had reached a kind of adolescence in terms not only of its age but also its unsettled nature of research findings. Certainly, a number of studies have confirmed actor-observer differences (Arkin & Duval, 1975; Eisen, 1979; Miller, 1975; Nisbett, Caputo, Legant & Marecek, 1973). On the other hand, a comparable number has either disconfirmed (Calder, Ross & Insko, 1973; Miller & Norman, 1975; Storms, 1973) or only partially supported the Jones and Nisbett hypothesis (Avis, 1979; Feather & Simon, 1971; Herzberger & Clore, 1979; Fichten, 1980; Harvey, Harris & Barnes, 1975; Ross, Bierbrauer & Polly, 1974).

In spite of the fairly extensive research comparing actors' and observers' attributions, these studies have for the most part, concentrated on laboratory effects (Eisen, 1979; Feather & Simon, 1971; Herzberger & Clore, 1979; Nisbett, Caputo, Legant & Marecek, 1973; Storms, 1973). Application of the Jones and Nisbett hypothesis to events outside the laboratory are few (Avis, 1983; Fichten, 1980).

In the Avis (1983) study, causal attributions of students' academic performance were provided by teachers (observers) and students (actors). Consonant

Evelyn Perloff, Ph.D. is Associate Professor of Psychology and of Nursing Research at the University of Pittsburgh. Patricia Bohachick, R.N., Ph.D. is Associate Professor of Nursing at the University of Pittsburgh, Pennsylvania.

with the Jones and Nisbett hypothesis, teachers attributed less importance to situational factors versus dispositional factors than did students (Avis, 1983). Other findings did not support actor-observer predictions. Fichten (1980) compared "happy and distressed couples' self and spouse perceptions and their attributions about the causes of their own and their spouse's behavior" (p.1). Results indicated that distressed couples made causal dispositional attributions for their spouse's negative behaviour but causal situational attributions for their own negative acts. Additional results again only offered partial support for hypothesized actor-observer differences.

It seemed clear, at least, to us that there was a general dearth of applied research, with particular absence of studies related to health behaviour, designed to test the Jones and Nisbett hypothesis. And yet back in 1974, Rosenstock and Kirscht noted: "Every health program that involves obtaining the cooperation of clientele . . . makes some assumption about how people behave, and why they behave as they do and how that behavior might be modified" (p. 470). If patients (actors) and health-care professionals (observers) do differ in their causal attributions of health and illness behaviour, it surely follows that recognition and understanding of these differences are essential for successful patient care.

The purpose of the present research was to assess differences in actors' (patients') and observers' (health care professionals') attributions for failure to control unhealthy physical conditions. Actors would be represented by patient groups with two diagnoses. Observers would include four groups of health care professionals (master's prepared nurse clinicians, undergraduate senior nursing students, junior medical students and freshman medical students).

Following directly from the Jones and Nisbett (1972) actor-observer paradigm, we then hypothesized that patients (actors) would be more situationally oriented and less dispositionally oriented concerning lack of control of their unhealthy physical condition than health care professionals (observers). We also contended that, of the four health care professional observer groups, master's prepared clinicians would identify most with patients in attributions of their behaviour, because nursing stresses psychosocial aspects of patient care. Conversely, we anticipated that junior medical students would be most dispositional in their attribution of patients' failure to control their unhealthy physical conditions, because medicine has an educational emphasis on the pathophysiological aspects of illness. (See Figure 1).

Two conditions were selected for study - hypertension and obesity - because they represented physically unhealthy conditions and permitted comparison on two additional dimensions. A first dimension suggested a physical-psychological continuum, with hypertension physically based and

ACTORS		OBSERVERS		
Patients	Master's Prepared Nurse Clinicians	Senior Nursing Students	Freshman Medical Students	Junior Medical Students
Most Situational			Most Dispositional	

Figure 1
Anticipated causal attributions for sample actors and obsesvers

obesity psychologically oriented. The second dimension, probably not uncorrelated with the first, reflected a continuum of controllability-uncontrollability, where hypertension suggests more external control and obesity implies more internal control.

Method

Prior to design of this study, a questionnaire had been developed to measure common attributions offered by patients for their failure to improve a physically unhealthy condition. Construction of the questionnaire not only followed appropriate measurement procedures, but also derived from common attribution theory. More specifically, items were prepared to assess dimensions of control, stability and locus. The format selected resembled that of questionnaires used in other attribution studies. A structured scale approach was used because Elig and Frieze (1979) have shown that this method not only has better internal validity and reliability, but that a structured scale approach was preferred to open-ended questions.

The questionnaire required respondents to rate the extent to which each of 28 factors was involved when patients' high blood pressure or overweight problem did not improve. Ratings were made on a seven-point scale where 1 and 7 represented lowest and highest degrees of attribution, respectively.

The questionnnaire was initially reviewed by 12 psychology and nursing faculty members to ensure that items were relevant and clearly stated. Following further editing, the scale was pre-tested with 138 graduate nursing students in various areas of specialization. The final questionnaire administered contained 28 items. A copy of the questionnaire is available from the authors.

The questionnaire was factor analyzed and revealed the existence of two scales. Reliability (Cronbach's alpha) for the dispositional scale (internal items) was .80, with fairly high intercorrelations among the items. Reliability for the situational scale (external items) of the questionnaire was .64. Additionally, items did not correlate highly. It seemed that judges could place items into internal or external categories, but subjects appeared to understand the relationship between causality and failure to control unhealthy conditions for dispositional factors only. This problem could probably be solved by items that explain situational causes more fully. Therefore, it seemed that we would be wisest to adopt the dispositional scale by itself to test our hypotheses.

Two studies were conducted. They involved health care professionals' (observers') and patients' (actors') attributions for failure to control (1) high blood pressure or (2) an overweight problem.

Procedures for conducting both studies were straight forward, with participation voluntary and anonymous. Written consent to participate in the study was obtained from all participants. Both groups of patients (hypertensive and overweight) completed questionnaires during routine clinic registration procedures. Health care professionals, recruited at the University of Pittsburgh School of Medicine and School of Nursing, completed their questionnaires during the first ten minutes of a regularly scheduled class.

Study 1

Subjects

This first study recruited 76 patients with hypertension from a hypertension clinic in a large teaching hospital. The health care professionals included 24 master's prepared nurse clinicians, 30 undergraduate senior nursing students, 19 junior medical students and 24 freshman medical students.

Of the 76 patients with hypertension, 55 percent were female. Patients' ages ranged from 15 to 84 years, with 48% between 45 and 64. Just over half the patients (54%) were married, with the remaining 46% single, widowed or divorced. Of the 76 patients, 21% were college graduates, 35% had completed high school and the remaining 44% had some high school or less. Employment information indicated that 46 percent were employed and 54% were not employed.

Not surprisingly, health care professionals differed from patients. Thus, of the 43 medical students, almost two-thirds were male (65%) and 70% were 23 years of age or younger. Just over two-thirds (69%), were single or separated and 31% were married. Among the 54 nurses, however, most were

female (83%) and less than half (41%) were 23 years of age or younger. Again, twothirds (67%) were single or separated and 33% were married.

Results

Table 1 presents attribution means and standard deviations for lack of control of hypertension. Means for the five groups surveyed were: senior nursing students, MS=45.40; master's prepared nurses, MM=45.33; freshman medical students, MF=44.88; junior medical students, MJ=44.26; and patients, MP=38.53.

Table 1

Attribution of Means and Standard for Lack of Control of Hypertension

Group		M	SD	N
Nurses				
	Senior	45.40	6.28	30
	Master's	45.33	6.46	24
Medical Students				
	Freshman	44.88	6.51	24
	Junior	44.26	4.64	19
Patients		35.53	11.76	76

Table 2 presents a one-way analysis of variance for patient's and health care professional's attributions for patients' lack of control of their hypertension. The resulting $F_{4,168} = 5.53$ was statistically significant at $p = .0003$ and indicated that health-care professionals (four nursing and medical student groups) were more dispositional for patients' failure to control their hypertension than patients themselves. In contrast, our hypothesis that nurses would be less dispositional than medical students was rejected. That is, there were no significant differences among the four groups of health professionals.

Table 2***One-Way Analysis of Variance for Patient's and Health Care Professional's Attributions for Patients' Lack of Control of their Hypertension***

Source	df	SS	MS	F	P
Between groups	4	1821.01	455.25	5.53	.0003
Within groups	168	13831.79	82.33		
Total	172	15652.80			

Study 2***Subjects***

A total of 37 clients with obesity were recruited from a weight loss clinic in the same Northeastern metropolitan area. Of the health professionals who completed the questionnaire, there were 27 master's prepared nurse clinicians, 19 undergraduate senior nursing students, 15 junior medical students and 22 freshman medical students.

Demographic characteristics of the 37 overweight clients included the following. Of the group, 84 percent were female and in the age range between 35 and 64 years. Over two-thirds of clients (68%) were married, with the remaining 37% single, widowed or divorced. By education, 62% had completed high school and 38% were college graduates. Seventy-three percent were employed and 27% were not employed.

Among the 37 medical students three-quarters were male (76%), 70% were 23 years of age or less, 59% were single or separated, and 41% were married. Of the 46 nurses almost all were female (96%), 39% were 23 years of age or less, over half (57%) were single or separated and 43% were married.

Results

Table 3 presents attribution means and standard deviations for patients' unsuccessful weight control. Means for the five groups surveyed were: senior nursing students, MS=49.89; master's prepared nurses, MM=43.45; freshman medical students, MF=48.21; junior medical students, MJ=46.60; and patients, MP=39.43.

Table 3***Attribution of Means and Standard Deviations by Group (Obesity)***

Group	M	SD	N
Nurses			
Senior	49.89	5.53	19
Master's	43.45	6.28	27
Medical Students			
Freshman	48.21	6.55	22
Junior	46.60	5.73	15
Patients	39.43	7.70	37

Table 4 presents a one-way analysis of variance for patient's and health care professional's attributions for unsuccessful weight control. The resulting $F_{4,115}=11.94$ was statistically significant at $p<.001$. These results indicated that health-care professionals (the four nursing and medical student groups) were again more dispositional in their attributions for clients' failure to control their weight.

Table 4***One-Way Analysis of Variance for Patient's and Health Care Professional's Attributions for Patients' Unsuccessful Weight Control***

Source	df	SS	MS	F	P
Between groups	4	2074.63	518.66	11.94	.0000
Within groups	115	4993.96	43.43		
Total	119	7068.59			

Discussion

Although these two studies provided evidence of an actor-observer effect in health settings, we were unable to separate perceptual, motivational or information explanations to account for dispositional differences. That is, patients, like actors in other actor-observer studies, described themselves as less blameworthy than did the health care professionals who served as observers. Certainly, patients and health care professionals differed in how much they knew (information), with health care professionals far more knowledgeable about the physical conditions of hypertension and obesity. Patients, on the other hand, are far more aware of a variety of specifics that may have affected their health-related behaviour. As an example, Rodin (1978) pointed out health-care professionals may view patients not adhering to their medication regimens as "recalcitrant and uncooperative," but patients "would know that they stopped the medicine because it made them feel nauseous" (p. 531).

We suspect, however, that motivational factors may be most responsible for the significant actor-observer differences we noted. That is, attribution literature has acknowledged actors' hesitancy to accept responsibility for unsuccessful behaviour, seeking instead to blame either others or the situation (environment). The present studies, which involved actor-observer attributions for a highly undesirable outcome (failure to control unhealthy conditions), were probably more extreme examples of a negative outcome than has heretofore been reported. Not surprisingly, then, the patients should have been significantly less dispositional than the health care professionals, and review of the findings unequivocally found this to be so, $p < .0005$.

In contrast, lack of control of patient's unhealthy conditions may be viewed by health care professionals as a treatment failure, resulting in greater stress on patients' dispositionality. What we are suggesting here is that health-care professionals, in order to maintain their positive self-image for quality of patient care, blamed patients more intensely than observers would have in situations that were neither so personally nor professionally threatening.

Although we suspect that Jones and Nisbett may be pleased with our findings, we believe a more salient factor is the direct application of these results to health practice, especially because statistical significance held across two conditions (hypertension and obesity). Our conclusions that health care practitioners will be more likely to hold patients responsible for failure to improve than will the patients themselves should not be surprising to behavioural or health professionals; however, empirical data to this effect have been difficult to obtain. Such findings in health care settings are important because "the differences between the actor's biases and the observer's biases in attribution could sow seeds for misunderstanding between patients

and staff" (Rodin, 1978, p.533). What follows now, however, is recognition and acceptance of these findings and implementation of programs of behaviour change for patients and health-care professionals.

Focus of such programs should undoubtedly be cognitive and affective. That is, we should recognize that misattributions by both patients and health care professionals do exist and even get reinforced. Misattributions can be reversed if the observer's attention is directed specifically to situational demands on the actor (Jones, 1979). Therefore, it is important that health professionals become sensitive to their patients' attributions for failure to control unhealthy physical conditions. At the same time, we know that the feeling dimension can be influenced by employing a variety of role-playing techniques. Through role playing the health professional can gain a patient perspective on situational variables surrounding unhealthy physical conditions. By attending to situational variables such as financial and time cost of treatment, availability of resources, and quality of social support the health professional may develop a greater understanding of patients' behaviours with regard to health matters. This approach may be particularly appropriate because demographic characteristics of patients and health care practitioners often differ. We are unaware of any empirical data that suggest that attributions are either age related or education related. We recognized, of course, that the patient and health care professional samples were not comparable, especially with regard to age and education, but we also know that this is reality in health practice - patients are generally older, not as highly educated and probably of lower socioeconomic status than health care professionals.

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RÉSUMÉ

Attributions acteur-observateur pour le manque de contrôle des conditions physiques malsaines

L'objectif de cette recherche était d'évaluer les différences entre les attributions des patients (les acteurs) et les professionnels de la santé (les observateurs) pour le manque de contrôle des conditions physiques malsaines. Deux études ont été menées. L'échantillon de la première étude consistait de 76 patients souffrant d'hypertension et 94 professionnels de la santé. Tous les participants ont rempli un questionnaire où on leur demandait de marquer le degré auquel chacun de 28 éléments choisis était impliqué lorsque le niveau d'hypertension des patients ne s'améliorait pas. Une analyse des variantes a indiqué que les professionnels de la santé étaient beaucoup plus portés que les patients eux-mêmes ($p = .003$) à attribuer à leur disposition le fait que les patients étaient incapables de contrôler leur hypertension.

Dans la seconde étude, 37 clients d'un programme de contrôle de poids et 83 professionnels de la santé ont rempli un questionnaire où ils devaient indiquer leur perception d'éléments reliés au défaut de contrôler son poids. Une analyse des variantes a indiqué que les professionnels de la santé attribuaient le manque de succès des clients à contrôler leur poids bien plus ($p < .001$) à des éléments de disposition que ne le faisaient les clients obèses. La reconnaissance et l'appréciation des professionnels de la santé du fait que les patients et les professionnels diffèrent dans leur perception des éléments associés au défaut de contrôler les conditions physiques malsaines pourraient former la base d'une plus grande compréhension et acceptation des comportements des patients face aux questions de santé.

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