

CROSS-CULTURAL ISSUES OF HEALTH LOCUS OF CONTROL BELIEFS

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The paper reviews briefly the work on measurement of health locus of control and raises some issues for examination by cross cultural comparison. The implications of developments such as increased trend toward specialization, of pathological *vs* health maintenance models, of availability and cost of health services for patient perceptions of health locus of control are suggested as suitable fields for further study. Factors such as esteem in which the aged are held in different societies may have an impact on the HLC beliefs of the elderly in society. The paper poses questions regarding the role of health beliefs, behaviours and outcomes in differing cultures and the characteristics of the environment that lead to different expectancies in regard to health and illness, treatment and recovery.

Health locus of control (HLC) refers to the belief individuals have about who or what is the agent that determines the state of their health. If persons believe that their *own* behaviors affect whether they stay healthy, become sick, or recover from an illness, they are said to have an "internal" HLC orientation. On the other hand, beliefs attributing causation of health/illness to agents outside of the individual—such as other people, the environment, fate, luck, or chance—are referred to as "external".

The locus of control construct comes out of Rotter's (1954) social learning theory. Based on this theory, individuals who value being healthy *and* who believe that it is their own behavior that controls their health (*i.e.*, HLC internals), have the greatest potential for behaving in a health - enhancing manner. Persons who have experienced repeated failures to control their health and/or have become dependent upon other persons for assistance in maintaining or regaining their health, would hold more external HLC beliefs than persons who have never experienced illness or who were successful in moving toward a state of wellness.

HLC beliefs, thus, change depending upon one's own experiences. When a person is labeled an HLC internal or external, it must be kept in mind that this may be temporary designation and may not be true at other times or in other situations. It is even possible that a person could simultaneously espouse both internal and external HLC beliefs. Causation can be attributed internally for certain illnesses, and with other health problems attributed to external agents or random events.

Measurement of HLC

Measurement of HLC beliefs became standardized with the development of the original, unidimensional HLC Scale, an 11-item Likert scale (Wallston, Wallston, Kaplan, & Maides, 1976). High scorers on this instrument were termed "HLC externals", while those with lower scores were "HLC internals." This unidimensional tool subsequently has been replaced by the Multidimensional Health Locus of Control (MHLC) Scales, consisting of three 6-item measures designed to be more-or-less statistically independent of one another. There are two equivalent forms of the

MHLC Scales, (Wallston, Wallston, & Devellis, 1978).

The three MHLC dimensions are "internality" (IHLC)—the extent to which people agree that their behaviour controls their health outcomes; "powerful other externality" (PHLC)—the extent to which persons believe that health professionals, family members, or friends determine one's health; and "chance externality" (CHLC) the belief that fate, luck, or chance is responsible for what happens with one's health. The MHLC scales have acceptable levels of internal consistency reliability and are stable over time for persons whose health circumstances remain stable.

Early research with the HLC and MHLC scales has been summarized in two chapters (Wallston & Wallston, 1981, 1982), as well as in an entire issue of *Health Education Monographs* (Spring 1978) devoted to this area. The MHLC scales have been normed on samples in the United States of America, and most of the known published research utilizing these scales has been conducted in this country. Inquires about (and requests to use) the scales have been received from many countries including: Austria, Australia, Czechoslovakia, Canada, China (Hong Kong), Hungary, India, Ireland, Israel, Italy, Lebanon, Poland, The Netherlands, United Kingdom & West Germany. Some studies have been done in these countries and many others are in progress, either using the English versions or translations into other languages. Since the HLC construct is rooted in Rotter's (1954) social learning theory, it is logical to consider the role of social and cultural factors that may impact on health expectancy beliefs in differing cultures.

In the United States, an increasing amount of research has begun to establish normative data for HLC beliefs for a variety of sub-populations (e.g., healthy adults; chronically ill; elderly, etc.), while more research needs to be done to establish norms for varying ethnic and cultural sub-populations (e.g., Black, Hispanic). Some of these norms can be found in Wallston and Wallston (1981). The intent of this article is to speculate on the impact that

some variables (that differ across sub-cultures—both intra- and internationally) may have on subjects' reports of HLC beliefs. Empirical data will not be presented; rather, the purpose is to raise some issues that could later be best examined by cross-cultural comparisons.

In the Western cultures, particularly in the United States, the "scientific revolution" has fostered an aura of awe toward practitioners in the fields of science and medicine. Many lay people seem to hold the belief that science and medicine can accomplish almost anything if given sufficient time and resources. With the medical profession having a highly physiological disease focus (i.e., the "medical model") on the cure of illness rather than a more preventative model emphasizing health and health behaviours, "patients" turn to the health profession when they are ill and the doctor "fixes" them. The result has been to ascribe to the medical profession high status and high esteem that could support a control by powerful others belief orientation, especially among the ill. One then might question the extent to which health beliefs may differ (less powerful others?) in societies (e.g., in communist countries) where the physician is ascribed a less lofty role, or where the health professions endorse a more health-maintenance, disease-prevention model (e.g., in Canada or Scandinavia).

A related issue that might result in enhanced powerful others beliefs is the increasing trend toward specialization in the medical profession in the Western cultures. Here there is less reliance on the general practitioner and more on the specialist for treatment of psychological disorders. Thus, in societies where the health care provider is viewed as an expert in a particular area, one might logically expect the population to ascribe to the specialist an enhanced role in health related outcomes. The impact could also be a reduction in internality and/or chance related HLC beliefs.

In the United States, much emphasis is placed on the doctor-patient relationship, which is considered "sacred." Many states have laws impacting on this relationship, e.g., with regard to confidentiality

of information. The phenomenon of transference (taking positive or negative feelings and attitudes towards significant others and transferring them to the health care provider) in the doctor-patient relationship is relevant here. Where the transference is positive, one might hypothesize an enhanced powerful others belief, and where negative, a decreased powerful others and, perhaps, a more enhanced internal belief. Similar hypotheses might be made across cultures that place varying amounts of emphasis on the relationship between patients and providers.

The availability of health care services is another factor that may possibly influence HLC beliefs across cultures. In societies where health care services are less available, there may be an increased trend toward self-reliance, thus fostering internality, or, conversely, an enhanced perception of the role of luck, chance, and fate in health outcomes.

Issues which may directly impact on availability of service across countries, and thus indirectly impact on expectancy beliefs, would include such things as percentage of population below poverty level, cost of health care services, and availability of health insurance to defray the escalating cost of medical care. Even issues such as a society's view towards the use of legal remedies for improper health care (e.g., malpractice suits) may be mediating variables that impact cost and availability of health care services, and thus ultimately HLC beliefs. For example, one might examine across cultures the HLC beliefs of individuals using an availability by affordability paradigm. In societies where health care is both available and affordable, one might hypothesize an increased powerful others expectancy compared to societies where the reverse (low availability, high cost) is true. What happens in those societies where there is both low availability and low cost?

All of the aforementioned variables (availability, cost, status of the health care profession, etc.) may impact on health care utilization patterns, which in turn may affect HLC beliefs. If some societies foster a high reliance/dependency on the health care system and others emphasize

low utilization (more fate-oriented or emphasizing self-reliance), there could be differing emphases in people's perceptions and beliefs over control of their health.

In the United States, there has been a change over the past one or two centuries towards de-emphasizing the concept of self-reliance and increasing the emphasis on utilization of the health care system. In the first part of the 20th century, the national spirit of this country was one of high personal independence and a "do-it-yourself" mentality more than is currently the case. As such, there was less reliance on utilization of the health care profession in earlier days. However, paralleling the increasing industrialization and urbanization in the United States has been a de-emphasis on "do-it-yourself" and a greater emphasis on "get a machine or someone else to do it for you". While the health care provider has yet to be replaced by a machine, there appears to be an increasing dependency on the health delivery system, fostering a "take-a-pill if you don't feel well" mentality.

A hypothetical linear causal model here might look something like:

↑ industrialization and ↑ urbanization → ↑ use of luxuries and ↑ need for personal comfort → ↓ self-reliance and ↑ health care utilization → ↑ dependency on the health care profession → ↓ internality and ↑ belief in control of health by powerful others.

Thus an increasing multivariate study (across time in a culture or across cultures) might be to compare degree of dependency (on health care delivery), level of industrialization (or degree of reliance on luxuries), and HLC beliefs.

It would be interesting to examine changes longitudinally in HLC beliefs as the concept of socialized medicine sweeps through Western Europe and eventually the United States. A complementary cross-sectional analysis might be to compare health beliefs in societies that are considered socialistic with those considered more democratic.

Some unpublished data gathered at Vanderbilt University have shown a trend toward increased PHLC beliefs among the elderly. Whether this is due to a decrease in self-efficacy as one ages, a cohort effect or is a reflection of a national attitude toward the elderly is unclear. However, as medicine continues to increase the life span of individuals (who present increasing health complaints, and increasing demands on the health care system) and a higher proportion of societies are elderly, one might envision increasing PHLC beliefs within certain geographic areas. International differences in the states of the elderly may provide interesting cross-cultural trends, and increase the understanding of sources of variation in HLC beliefs. One might hypothesize, for example, that the elderly would endorse higher IHLC beliefs in societies where the aged are held in high esteem, as opposed to more youth oriented or utilitarian cultures.

In addition to the health care provider, the role of the family as a "powerful other" may prove to be an interesting variable across cultures. Different societies place differing values on the role of the nuclear family and extended family units. It may be that in societies that endorse strong family adhesion, PHLC beliefs derive from the family rather than from the health care profession. Many family researchers in the United States have seen an increasing trend toward disintegration of the family unit in this country, which may have fostered increased dependency on health professionals as powerful others.

The role of religion may also be a key cross-cultural variable in HLC research. Countries differ widely in the impact religion has on people's lives, ranging from jurisdictions where one predominant religion impacts all phases of its peoples' lives, to areas where religion is de-emphasized to the point of atheism. The MHLC scales deliberately do not tap the extent to which an individual attributes health outcomes to a supreme being. One can argue whether the concept of prayer to and faith in a supreme being is a totally orthogonal externality construct or whether it falls under the chance or powerful other dimensions of externality. It can

even be argued that an individual who endorses a belief that "praying to God will cure my illness" is endorsing an IHLC belief, in effect placing the outcome contingent upon the role of one's ability to influence divine intervention. It is even possible that all four possibilities occur in varying degrees across societies. For example, in countries where self reliance and internality are fostered, the role of religious beliefs may be highly correlated with IHLC beliefs. People could, in effect, say to themselves, "If I lead the right kind of life and am devout enough, I can influence God to keep me healthy." In societies where strong religious beliefs predominate, a person might endorse PHLC more highly, saying "If I follow what my religion says, my religious leaders and God will intervene for me." In societies that are more primitive or superstitious to the point of pantheism, the impact of religion may be more correlated with chance, luck, or fate (CHLC) beliefs. Finally in societies that de-emphasize religion, the belief in a supreme being may be unrelated to IHLC, PHLC, or CHLC beliefs.

The MHLC scales were developed to be as statistically independent of one another as possible (Wallston, et. al., 1978). This orthogonality means that, in most populations, it is possible that all combinations of scores on all three dimensions will occur with greater or lesser frequency. Wallston and Wallston (1982) proposed an 8-cell typology derived from crossing high and low scores on the IHLC, PHLC, and CHLC scales. Only three of the types were "pure" (i.e., high on two dimensions, low on the other two). The other types were "mixed" (i.e., high on two dimensions, low on one; high on all three; low on all three). It has been suggested that one of the mixed types—high on IHLC and CHLC, low on PHLC—would be particularly endorsed by adherents to Buddhism, where faith is placed on the individual or on divine fate, but not on other people. This speculation could be tested by cross cultural comparisons involving samples from religiously diverse countries. It would also be interesting to investigate the relative frequency of all eight types as a function of cultural differences.

Other Social Learning Theory Constructs

As the use of the MHLC scale proliferates in health research, investigators are cautioned to remember that the expectancy/locus of control construct is only one of three mediators of behaviour that Rotter (1954) originally postulated. Psychological situation and reinforcement value are equally important in the prediction of behaviour and its outcomes. Without examining the person's expectancies, and without examining the person's reinforcement value for engaging in the behaviour, there is no theoretical reason to believe that expectancy by itself will highly predict behavior potentials or outcomes. Both reinforcement values and the psychological situation may be greatly influenced by cultural and social differences.

Also, although not explicitly part of Rotter's social learning theory, a construct from Bandura's (1977a, 1977b) social learning theory that may be useful to researchers in different areas of the world is self-efficacy; while locus of control has received more attention, an equally important issue is one of perceived ability to carry out the behaviour. A person could endorse a high internality belief in terms of a behaviour leading to an outcome (e.g., "If I do x, so my health status will not be y"). Thus a person could highly believe that various exercise/dieting behaviours will result in weight loss (high internality) but not believe that he is able to perform the exercise/dieting behaviours that will result in weight loss (low self-efficacy). Whether Bandura's self-efficacy construct is different from Rotter's expectancy construct is unclear, but it is highly likely that both vary significantly across cultural settings.

Intentionally, this paper has posed many questions (with few answers) regarding

the role of health beliefs, behaviours and outcomes in differing cultures/situations around the world. However, it is clearly important not only to examine an individual's expectancies of behavior leading to outcomes, but also the characteristics of their environment that lead them to develop their expectancies. Much can be gained by taking the results from many culturally diverse samples and examining their similarities and differences. In the years to come, as data becomes available, investigators will hopefully be able to empirically address many of the research questions and hypotheses presented in this article.

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