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Disability Attitudes, Beliefs and Behaviours:  
Preliminary Report on an International Project  
in Community Based Rehabilitation<sup>1</sup>

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## **ABSTRACT**

A comparative international project on disability attitudes, beliefs and behaviours was carried out in Bangladesh, Canada, India and Indonesia in collaboration with partner institutions and researchers. This paper presents an overview of the preliminary findings across all communities, and includes information on sample and scale characteristics, and scale distributions. Among the variables measured were: beliefs (causal beliefs, control beliefs); and attitudes toward persons with a disability, and towards modes of relations with such persons. Responses within cultures (comparing persons with a disability, their family members, and community members), and across cultures indicate both similarities and differences that can be interpreted in terms of disability status and cultural background. Implications of these findings for health promotion and disability prevention in varying cultural contexts are presented.

## INTRODUCTION

The application of cross-cultural psychology to the improvement of the health status and the quality of life of peoples has increased dramatically in recent years (e.g. Dasen, Berry & Sartorius, 1988). There has been a simultaneous activity in the health sciences and professions generally, on the understanding and use of various "psychosocial factors" to promote positive health (WHO, 1982). However, it is evident that most of these "psychosocial factors" also vary across cultures, necessitating an expanded approach to these issues, one which has been termed cross-cultural health psychology (Berry, 1994, 1995). One specific area of concern within this general field is that of disability (see e.g. Groce & Scheer, 1990; Scheer, 1994).

The main theme of the project reported in this paper is that, among the many factors affecting disabilities, probably the most important are the beliefs, attitudes and behaviours surrounding a person with a disability (henceforth PWD). It is contended, first, that the character of the social and physical environments in which PWD's live is a major factor affecting their quality of life; and second that these social and physical environments may vary substantially across cultures. Hence, an understanding of how these factors are distributed across cultures is an important first step to understanding disability, and to improving the quality of life of PWD's.

Some important distinctions provide a starting point for this line of argument. First is the conventional distinction between impairment, disability and handicap:

- impairment refers to the loss or abnormality of structure or function (e.g. a leg)
- disability refers to some restriction or lack of ability to perform a particular activity (e.g. participation in a tug of war)

- handicap refers to some disadvantage that limits or prevents the performance of a particular role (e.g. not being hired to deliver mail)

Second, we distinguish between the social and physical environments:

- social environment refers to the beliefs, attitudes and behaviours that surround a PWD, and that are communicated to a PWD as positive or negative messages.

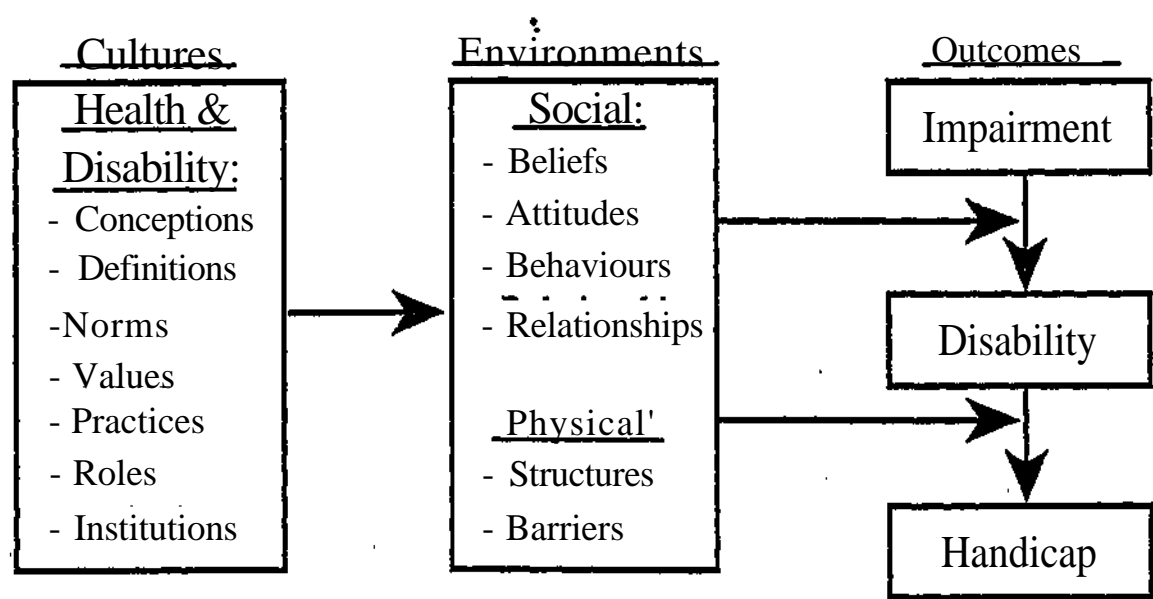
- physical environment refers to the natural and man-made physical structures that surround a PWD, and that limit (as barriers) or promote (as assistive devices) one's activities. These are considered to reflect the social environment (attitudes) as well as the capacity of a community to modify the environment (e.g. resources).

It is contended that the character of both the social and physical environments play an important role in transforming an impairment into a disability, and thence into a handicap.

Third, we expect that there are important variations across cultures (those complex organizing systems of shared values and actions) that affect both the very meaning of disability and the environments in which PWD's carry out their lives. These distinctions are illustrated in Figure 1.

In this paper, we will be emphasizing the cultural variations (both similarities and differences) in the social environments (disability attitudes, beliefs and behaviours, henceforth DABB) that may give rise to physical disability and handicap.

Figure 1: Cultural Variations Underlying Social and Physical Environments:  
Impact on Impairment, Disability and Handicap



## DESIGN OF STUDY

Research on DABB was carried out in four countries by five partner institutions (see Figure 2), involving many individuals (see Note 1). In India there are two rural village sites (near Allahabad) and three sites in or near Bombay (one urban, and two rural); in Bangladesh there is one rural village site (near Dhaka); in Indonesia, there is one rural regional sample drawn from a set of twelve villages (in North Sulawesi); and in Canada there is one town site (Napane) in Ontario, and one rural Aboriginal village site (Meadow Lake) in Saskatchewan.

The goal of this exploratory study was to discover any similarities or differences in disability attitudes, beliefs and behaviours on which future local or international community-based rehabilitation projects could be developed. In addition, for some of the communities, information from this first phase of the DABB study will serve as baseline data for designing community intervention projects and, in a second phase, for monitoring attitude and behaviour changes that may result from these projects.

In keeping with recommended practice in cross-cultural psychology, information was gathered at both the cultural group (community) level, and at the individual level (see Figure 2). Community data were derived from archival sources (for demographic, economic, and political features, and with respect to health and disability services), from interviews with key informants (for informed views about these same matters) and by an interview survey of community members (for representative views). These community-level data are not yet analysed, and hence are not reported in this paper. Individual-level data were collected using the DABB interview instrument with three samples of respondents: persons with a physical disability: caregivers to these persons, usually a family member; and a representative sample of the community. Comparisons among these three samples (within communities) are intended to provide information on the differential beliefs, attitudes and behaviours that can convert impairment into disability and handicap. Comparisons across countries are intended to reveal similarities and differences that may reflect varying features of their respective cultures.

Figure 2: Design of International Study of Disability Attitudes Beliefs and Behaviours (DABB)

| CULTURES                              |  | INFORMATION OBTAINED   |                           |
|---------------------------------------|--|------------------------|---------------------------|
| Bangladesh:<br>- Narsingdi            |  | Community Data Sources | Individual Data Samples   |
| Canada:<br>- Meadow Lake<br>- Napanee |  | - Archives             | - Persons with Disability |
| India:<br>- Allahabad<br>- Bombay     |  | - Key Informants       | - Family Member           |
| Indonesia:<br>- North Sulawesi        |  | - Community Survey     | - Community Survey        |



Figure 3: DABB Interview Outline (PWD Version)

| VARIABLES                              | CONTENT  |
|--|--|
| 1. Biographical:                       | Age, Gender, Education, Household, Economic Resources                                      |
| 2. Meaning of Disability,              | Severity, Activities, Causes, Difficulties, Help-Seeking                                   |
| 3. Causal Beliefs:                     | Internal, External, Cosmic   |
| 4. Control Beliefs:                    | Internal, External   |
| 5. Major Worries,                      | Problems   |
| 6. Attitudes toward Disability:        | 12ItemLikert   |
| 7. Attitudes toward Disability:        | 8 Item Semantic Differential   |
| 8. Relational Attitudes:               | 20 Item: Assimilation, Integration, Separation, Marginalisation                            |
| 9. Health Behaviours:                  | Prevention, Family, Agencies   |
| 10. Responsibility for Rehabilitation: | Internal, External, Cosmic   |
| 11. Community Support:                 | Positive, Negative   |
| 12. Technology:                        | Assistive Devices Needed/Used for Daily Activities,<br>Community Activities, Communication |

## INSTRUMENT

Although many studies have been carried out on attitudes towards physical disability (e.g. Gething, 1986), only few have been at all cross-cultural (e.g. Westbrook et al, 1993). Given the need for an instrument that is both wide ranging and suitable for cross-cultural use, the project team developed a set of questions that would elicit both community- and individual-level information (see Figure 3). In this paper we are mainly concerned with five of the variables listed in Figure 3 (numbers 3, 4, 6, 7 and 8).

Causal Beliefs refer to what people think was the origin of a disability in the past. In the literature on attribution of cause in social psychology, a basic distinction is made between internal and external explanations about why people behave the way they do, or are the way they are. Internal attributions represent beliefs that individuals act in ways that are rooted in some personal characteristic or trait. Thus an internal belief about the cause of disability is indicated by accepting that it is due to what an individual did or did not do (e.g. one's own mistakes). In contrast, an external belief is indicated by accepting that it is due to some event outside oneself (e.g. malnutrition or an accident) in the natural or social environment. A further distinction was made in this project, adding the category of cosmic beliefs. These beliefs are indicated by accepting that disability is caused by an agency that is neither internal to oneself, nor in the natural world, but lies in the supernatural realm (e.g. fate, luck, God's will). Each participant obtained a score on each of these three kinds of belief.

Control Beliefs refer to what people think one can do to control the disability at the present time. Here, we were interested only in the contrast between internal

and external beliefs (e.g. how much one can control a disability from becoming worse). Each participant received one score, with high being more internal.

Attitudes. There were three kinds of attitudes measured in this project. Attitudes are essentially evaluations (positive or negative) or preferences (for or against) certain options that are held by people. In the first attitude measure (Likert Attitudes), we were interested in how individuals saw and evaluated the differences between PWD's and others. This scale was based on one developed by Yuker, Block and Campbell, 1986), but it was substantially modified for our cross-cultural use. It asked about one's degree of agreement or disagreement with statements such as "Disabled people can have social activities like anyone else" (scored as a positive item), or "It is difficult to involve disabled people in the community" (scored as a negative item). Each participant received a single score, with high being more positive or accepting.

A second attitude measure (Semantic Differential) was sought to obtain the affective appraisal people have of PWD's. It obtained ratings of PWD's on a number of bi-polar scales with opposing adjectives at each pole (e.g. strong - weak, useless - useful). Each participant received a single score, with high being more positive.

The third attitude measure borrowed some ideas from the research literature on acculturation. When people from two cultures are in contact they can establish relations in a number of different ways (Relational Attitudes). Perhaps the most useful way to identify the various orientations individuals may have is to note that two issues predominate in the daily life of most people in contact. One pertains to the maintenance and development of one's distinctive-ness in society, deciding whether or not one's identity and customs are of value, and should be retained. The other issue involves the desirability of contact with others, deciding whether relations

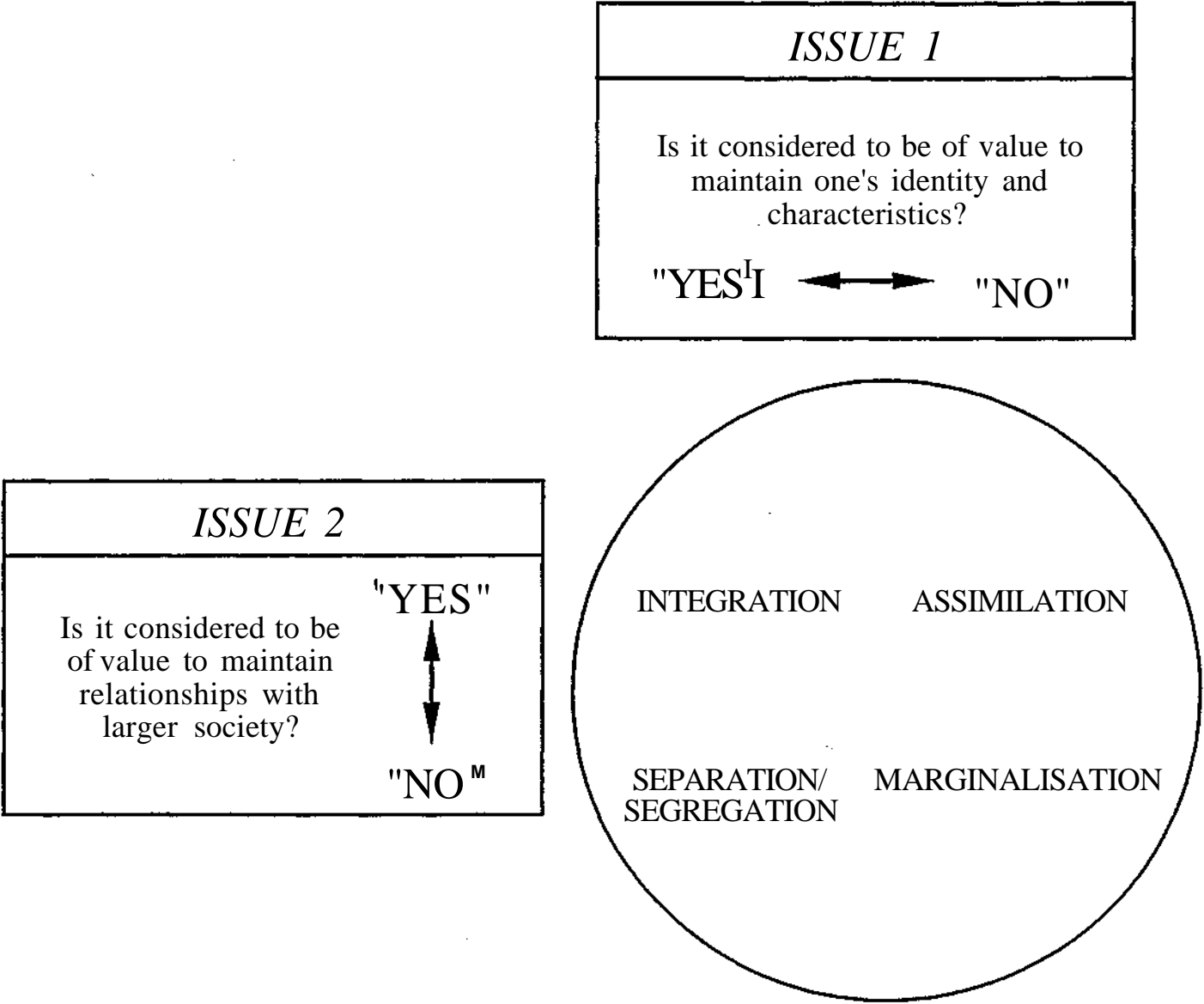


FIGURE 4      FOUR VARIETIES OF GROUP RELATIONSHIPS,

with other groups are of value and should be sought. These two issues are essentially questions of attitudes, and may be responded to on a continuous scale, from positive to negative. For conceptual purposes, however, they can be treated as dichotomous ("yes" or "no") preferences, thus generating a fourfold model (see Figure 4). Each alternative in this fourfold classification is considered to be strategy or option available to individuals and to groups towards which individuals may hold attitudes; these are Assimilation, Integration, Separation, and Marginalisation.

The concepts of Integration, Assimilation, Segregation/Separation and Marginalisation are well-known in the literature on disability. In fact, they are often used in a very similar way, suggesting that we could assess attitudes towards PWD's in the same way that acculturation attitudes are assessed (see Berry et al, 1989). In this case, Assimilation implies that PWD's should be treated exactly like other people, Integration implies that PWD's have special characteristics and should be accepted on that basis, Segregation implies that they are different and should be kept away because of these differences, while Marginalisation implies that PWD's have no special needs, but they should be distanced, even neglected. Each participant received a score on each of the four scales, with a high score indicating a preference for that particular kind of relationship.

The draft DABB instrument was piloted in India, and changes were made to improve comprehension, and scale internal consistency. The revised instrument was translated from English where required (using the forward and back translation procedure) and fielded during 1993 and 1994. Local data analyses were undertaken and site-specific reports are being prepared. Preliminary comparative analyses on selected variables were carried out, and are the basis of this paper.

## RESULTS

The actual numbers of participants in each sample for each location are presented in Table 1. These vary from the intended size of 60 per sample for a variety reasons, including ongoing data collection of the community samples in Napanee and Meadow Lake.

Demographic characteristics of the various samples were examined by site and sample type. There are large variations in mean age (a low of 26 in Allahabad PWD to a high of 60 in Napanee PWD), gender ratio (a low of 10% female in Dhaka COM to a high of 75% female in Dhaka FAM), education (from a low of 0% no schooling in all Napanee samples, to a high of 65% in Dhaka FAM), and marital status (from a low of 28% married in Meadow Lake PWD, to a high of 90% in Napanee COM). However, these demographic factors were not substantially correlated with beliefs and attitudes, and so these differences do not cause any interpretive problems.

Mean scores obtained by the samples on the various belief and attitude scales are presented graphically in Figures 5 to 8. Variations within cultures (across the three samples), and across cultures (sites) are of interest.

For Causal Beliefs (Figure 5), views about the origins or causes of disability (in the past) vary both across the three samples (within sites) and across sites. External beliefs are relatively high in Napanee and Bombay, lower in Indonesia; Internal beliefs are relatively high in Napanee and Indonesia, lower in Dhaka; and Cosmic beliefs are relatively high in Dhaka, lower in Napanee and Bombay. Within sites, both External and Internal beliefs vary across the three samples only in Allahabad and Indonesia, while Cosmic beliefs vary only in Allahabad. There is no clear cut pattern to these within culture variations.

**TABLE**    Samples in the DABB Study

| LOCATION          | SAMPLE |     |     |
|-------------------|--------|-----|-----|
|                   | PWD    | FAM | COM |
| <i>BANGLADESH</i> |        |     |     |
| Dhaka             | 60     | 60  | 60  |
| <i>CANADA</i>     |        |     |     |
| Meadow Lake       | 40     | 40  | 0*  |
| Napanee           | 61     | 40  | 19* |
| <i>INDIA</i>      |        |     |     |
| Allahabad         |        |     |     |
| Siradhu           | 32     | 32  | 32  |
| Setukaran         | 38     | 38  | 38  |
| Bombay            |        |     |     |
| BBD Chawls        | 60     | 60  | 60  |
| Ellora            | 30     | 30  | 30  |
| Juchandra         | 30     | 30  | 30  |
| <i>INDONESIA</i>  |        |     |     |
| Solo              | 72     | 84  | 68  |
| TOTAL             | 423    | 414 | 337 |

OVERALL SAMPLE: 1174

*\* Data collection still in progress*

FIGURE 5 MEAN SAMPLE CAUSAL BELIEFS

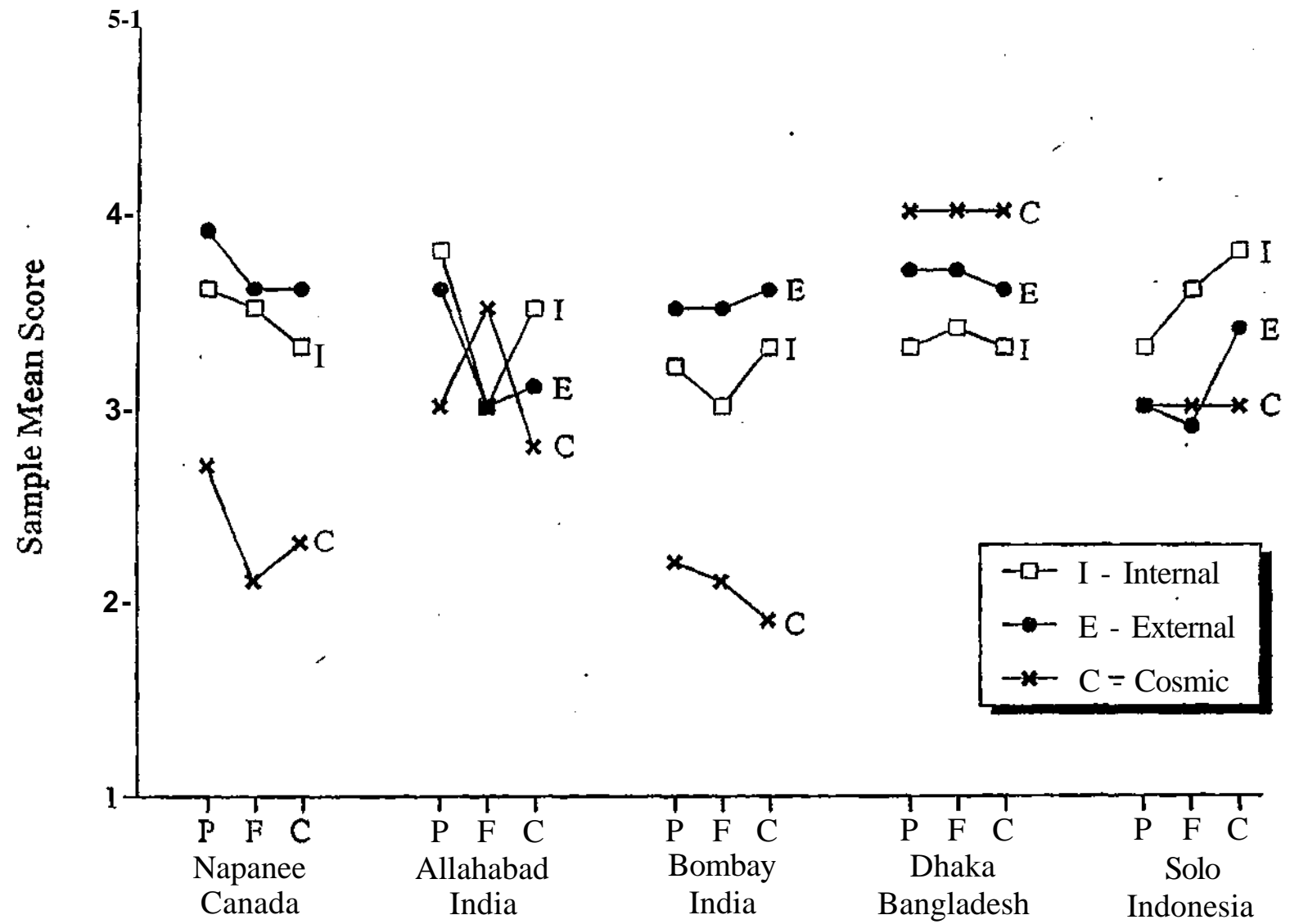




FIGURE 6 MEAN SAMPLE CONTROL BELIEFS

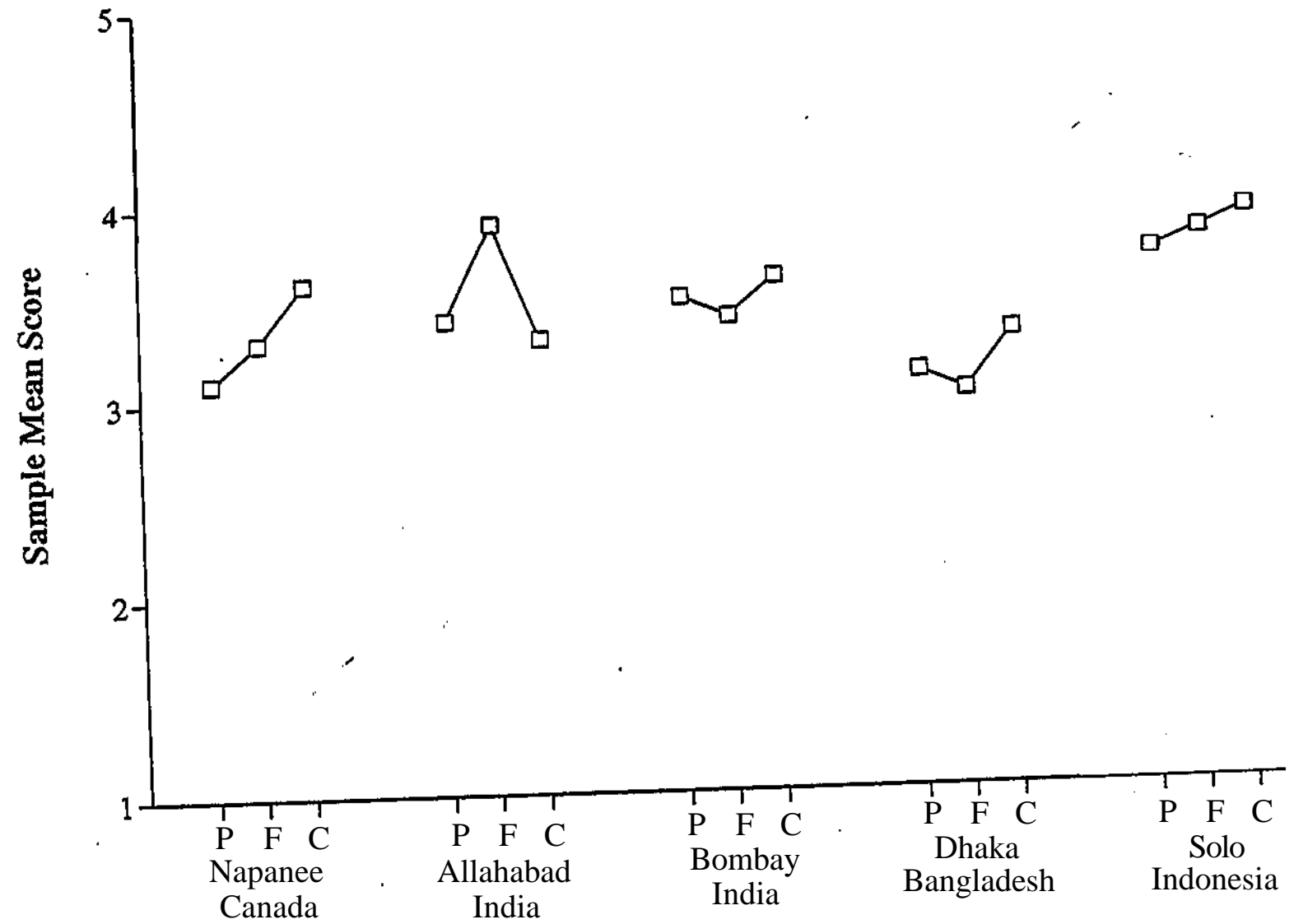


FIGURE 7 MEAN SAMPLE REHABILITATION BELIEFS

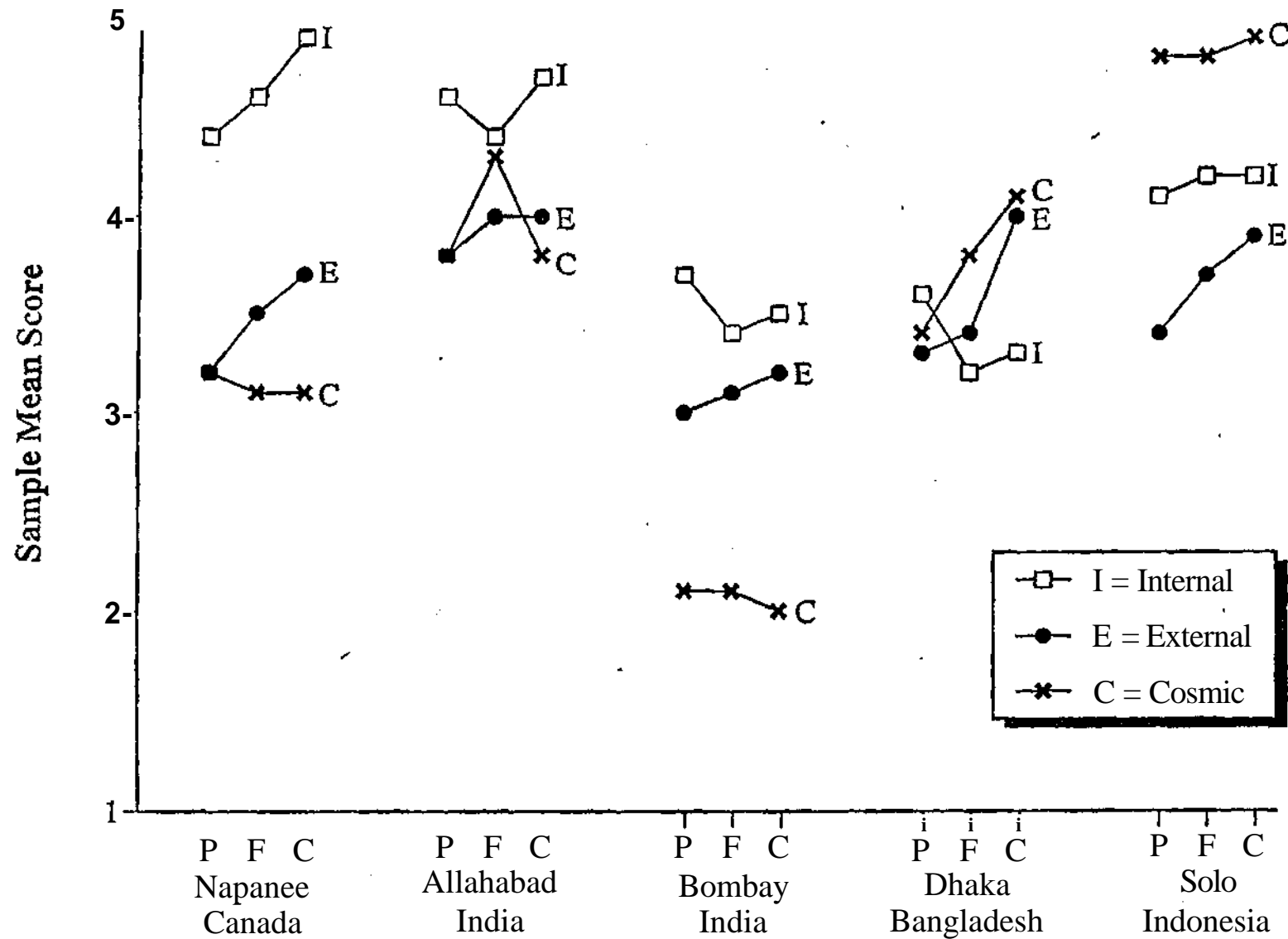


FIGURE 8 MEAN SAMPLE LIKERT AND AFFECTIVE ATTITUDES

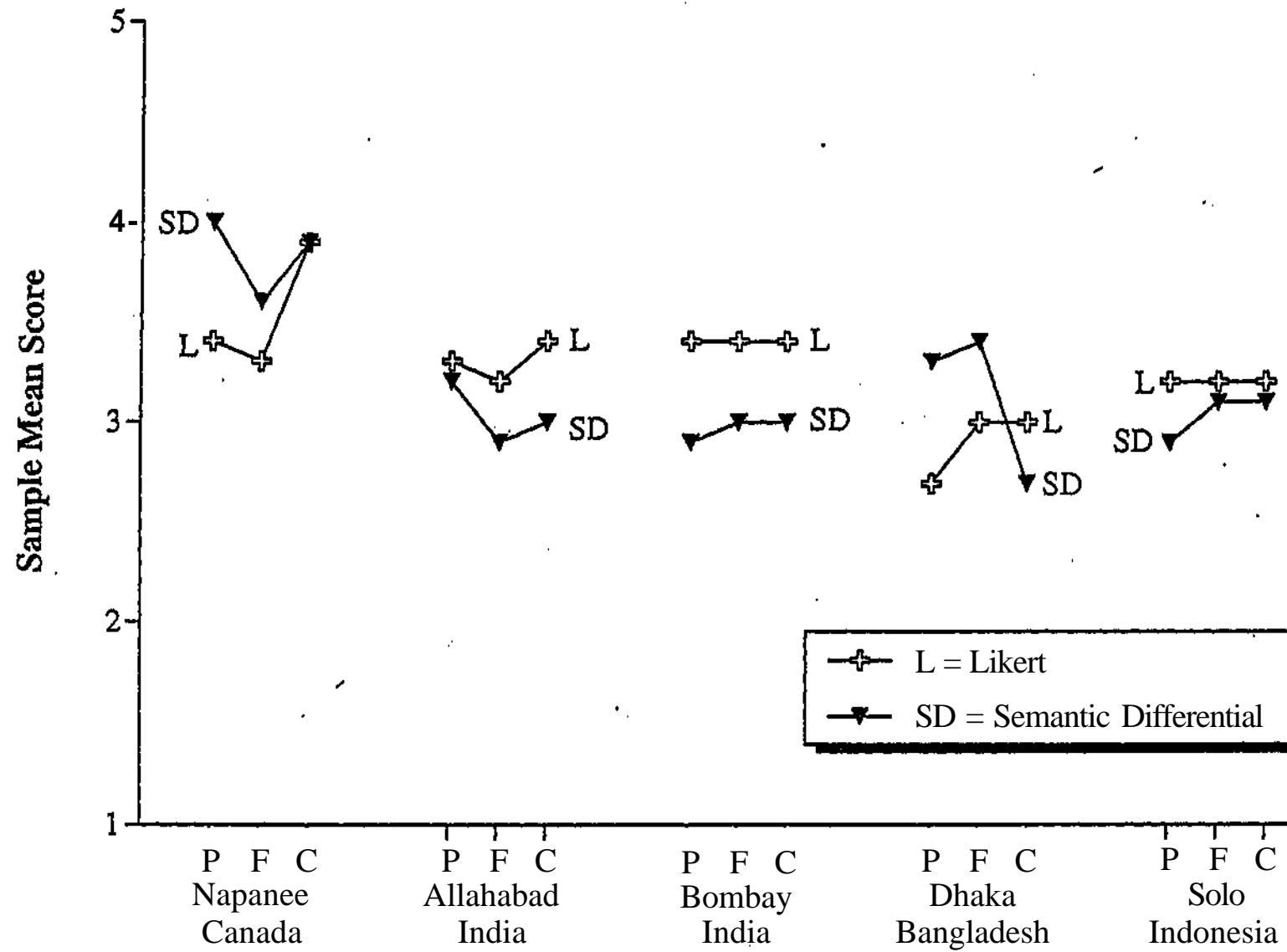
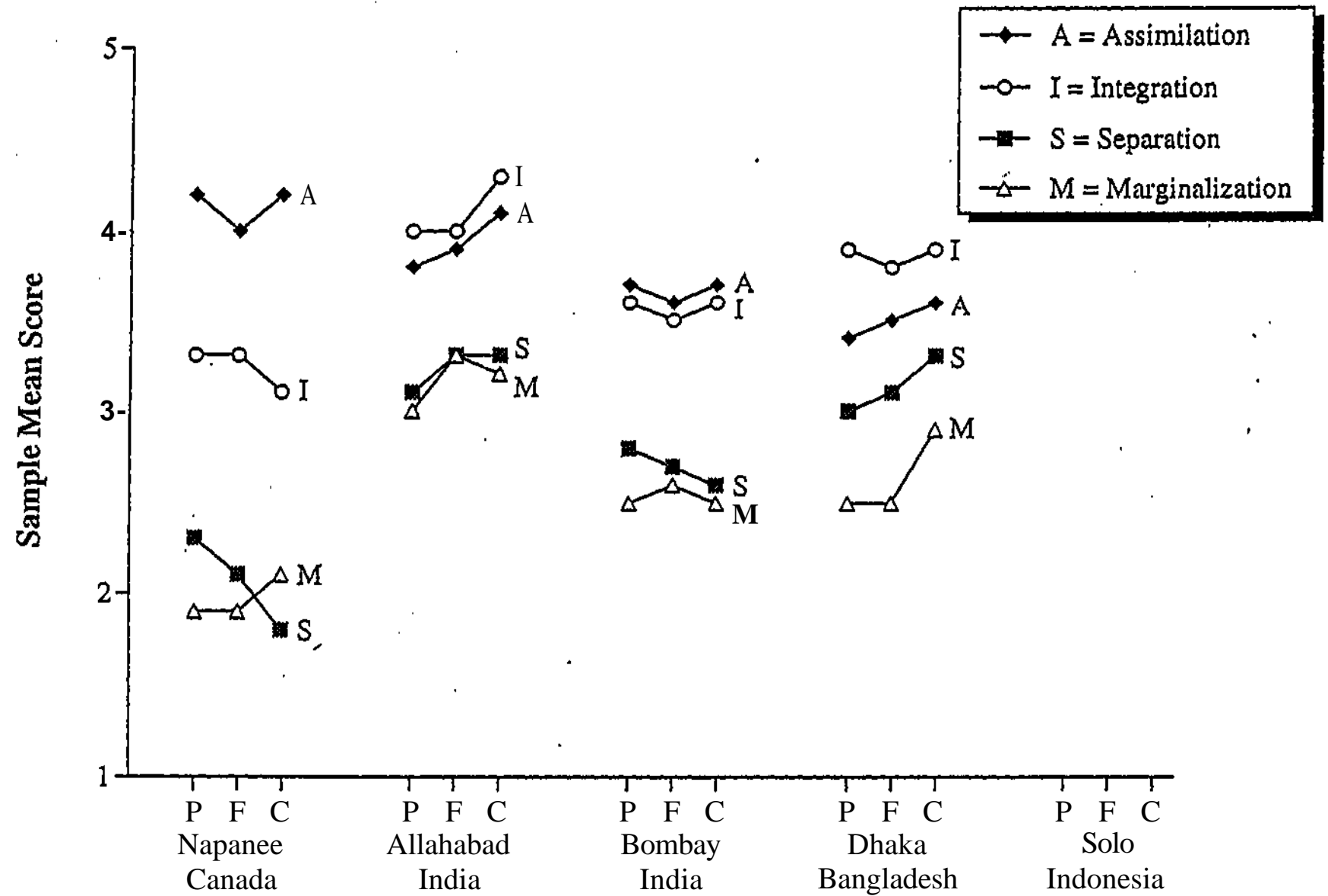


FIGURE 9

MEAN SAMPLE RELATIONAL ATTITUDES



For Control Beliefs (Figure 6), which are views about how much an individual can affect one's disability (at present), there is virtually no variation across cultures; however there is some variation across samples, with greatest variation appearing in Allahabad, where Family beliefs are highest.

For beliefs about the Responsibility for Rehabilitation (Figure 7), variation exists both across and within cultures for all three kinds of belief: External beliefs are highest in Allahabad, lowest in Bombay; Internal beliefs are highest in Napanee and Allahabad, lowest in Dhaka; and Cosmic beliefs are highest in Indonesia, lowest in Bombay.

Turning to Attitudes (Figure 8), again variations are evident both across and within cultures. Attitudes are most positive in Napanee, and lower but about even across all other sites. Variation across samples is greatest in Dhaka (with PWD's having least positive attitudes towards themselves), and Napanee (with FAM having relatively less positive attitudes than PWD or COM).

With respect to preferred Modes of Relations with PWD's, Figure 9 shows large variation. Generally, Assimilation and Integration are preferred to Separation or Marginalisation, and there are no significant variations across cultures on these two attitudes. However, large variation is present across cultures on Separation and Marginalisation. Within sites, there are large differentiations among the four kinds of relationships; this is most evident in Napanee and Dhaka where all four have clear-cut differential levels of acceptance; in Allahabad and Bombay, there are two distinct groups (Integration and Assimilation, versus Separation and Marginalisation). Across samples, within cultures, variations are present most noticeably for Separation in Napanee (highest among PWD's themselves, lowest among COM) and Dhaka (the reverse pattern), and for Marginalisation in Dhaka (highest among COM, and lower for PWD and FAM).

## DISCUSSION

Although these are selected and preliminary results, some important meanings can be discerned from them. Beliefs and attitudes towards causes, control and responsibility for disability, and relationships with persons with a disability, clearly vary across the samples in this study. To the extent that such beliefs and attitudes affect PWD's (as proposed in Figure 1), it is essential to understand such variations in how they are viewed. No community presented a profile of beliefs and attitudes that was identical to any other community. Thus, programmes to change beliefs and attitudes will need to be tailor-made for each community, and be based on these findings.

Of particular interest is the contrast between causal beliefs across the samples: they were clearly low in Napanee and Bombay, intermediate in Allahabad and Indonesia, and high in Bangladesh. One possible explanation is the varying nature of religious beliefs across these cultures, with a differential acceptance of fate as a cause of one's problems.

Also of interest is the contrast between the minimal variability in attitudes (Likert and Affective) across samples, and the substantial variability in Relational Attitudes across samples. Previous research has emphasized measures of liking or acceptance of PWD's (which, in this study lie at, or just above, the mid point of acceptance), while the more important story in this study is in the variation in how one wishes to relate to PWD's. In all cases Integration and Assimilation attitudes (which indicate acceptance of PWD's) are more positive than Segregation and Marginalisation (which indicate rejection), but there is wide variation in the relative preferences for these various options across cultures. This approach to understanding attitudes may well prove to be the more informative when gauging people's orientations to PWD's and in developing appropriate programmes. Changing these Relational Attitudes may prove to be more useful than just focussing on affective reactions, since they indicate practical ways in which relationships may be restructured.

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## Notes

1. This paper is based on work by a team of researchers associated with the International Centre for the Advancement of Community Based Rehabilitation (ICACBR), funded by the Canadian International Development Agency (CIDA). Members of the research team are: Ajit Dalai, Namita Pande, Deepa Punetha and Nisha Dhawan (University of Allahabad, India); Manik Shahani, Mira Shahani, Rajani Kelkar and Rajashree Sabnis (University of Bombay, India); Nasir Uddin and Rezaul Farid Khan (VHSS, Bangladesh); Handojo Tjandrakusuma, Bhisma Murti and Laura Krefting (PPRBM, Solo, Indonesia); Cathy Lysack (University of Manitoba, Canada); Philip Cook (University of Victoria, Canada); and Will Boyce and Jayant Lele (Queen's University, Canada). Comparative data analyses were carried out by Susan Wheeler. Many colleagues, research assistants and field workers contributed greatly to the development and conducting of research, including Jashim Uddin, Adilukito, Liz Rolston, Holly Millinoff, Maureen Lerat. We also very much appreciate the support of ICACBR, including the Executive Director, Malcolm Peat, and its staff members, Lorna Jean Edwards, Dawna Winges and Anne Mitchell. The DABB research group was coordinated by John Berry.