**Linguistic Bias** One arena in which potential bias in cross-cultural research becomes quickly apparent is in language. Cross-cultural research is unique because it often involves collecting data in multiple languages, and researchers need to establish the linguistic equivalence of the research protocols. **Linguistic bias refers** to whether the research protocols—items on questionnaires, instructions, etc.—used in a cross-cultural study are semantically equivalent across the various languages included in the study.

There are generally two procedures used to establish linguistic equivalence. One is known as back translation (Brislin, 1970). Back translation involves taking the research protocol in one language, translating it to the other language, and having someone else translate it back to the original. If the back-translated version is the same as the original, they are generally considered equivalent. If it is not, the procedure is repeated until the back-translated version is the same as the original. The concept underlying this procedure is that the end product must be a semantic equivalent to the original language. The original language is decentered through this process (Brislin, 1970, 1993), with any culture-specific concepts of the original language eliminated or translated equivalently into the target language. That is, culture-specific meanings and connotations are gradually eliminated from the research protocols so that what remains is something that is the closest semantic equivalent in each language. Because they are linguistic equivalents, successfully back-translated protocols are comparable in cross-cultural hypothesis-testing research.

A second approach to establishing language equivalence is the committee approach, in which several bilingual informants collectively translate a research protocol into a target language. They debate the various forms, words, and phrases that can be used in the target language, comparing them with their understanding of the language of the original protocol. The product of this process reflects a translation that is the shared consensus of a linguistically equivalent protocol across languages and cultures.

Researchers may combine the two approaches. A protocol may be initially translated and back-translated. Then the translation and back-translation can be used as an initial platform from which a translation committee works on the protocol, modifying the translation in ways they deem most appropriate, using the back-translation as a guideline.

**Procedural Bias** The issue of bias and equivalence also applies to the procedures used to collect data in different cultures. For instance in many universities across the United States, students enrolled in introductory psychology classes are strongly encouraged to participate as research subjects in partial fulfillment of class requirements. American students generally expect to participate in research as part of their academic experience, and many American students are "research-wise."

Customs differ in other countries. In some countries, professors simply collect data from their students or require them to participate at a research laboratory. In some countries, students may consider it a privilege rather than a chore or course requirement to participate in an international study. Thus, expectations about and experience with research participation may differ.