

FROM THE EDITOR'S DESK

by Kelly Brennan
SUNY College at Brockport

The current crew of associated editors have ended their terms. Many thanks to all. Interested in becoming an associate editor? Contact me. I'm particularly interested in expanding the number of book reviews and depend on others to inform me of books they'd like reviewed and to help locate appropriate reviewers (well, actually, *hound* is more like it). In addition, I'd welcome contributions regarding story ideas. Serious potential for promotion to editor in two years! Act now!

I've had a few publishers ask me about advertising. Most are interested in having their book flyers inserted in with issues of the *Bulletin*. The policy is that publishers may include their flyers in our mailings if members are offered significant price discounts on the books. All interested should contact me.

The current issue includes two special feature articles likely to interest relationship researchers. The first feature is a summary of why relationship researchers could benefit from using taxometric analyses, written by Chris Fraley. Taxometric analyses are designed to help discern whether constructs are typological or dimensional, and, as Chris explains, are likely to be useful for relationship researchers who may be concerned with identifying relationship types or styles.

The second feature is a round-robin discussion of an issue near and dear to relationship researchers' hearts: How best to conceptualize and assess relationship quality. Several prominent relationship researchers agreed to share their wisdom on this topic. This discussion is intended to spark debate on how best to address this problem. (Feel free to contribute reactions to these comments; we may have a second-round round-robin in the fall issue of the *Bulletin*.)

In addition, as part of our regular features, Cathy Surra has contributed a highly thoughtful, engaging article on mentoring for this issue's *Teaching Tips* column. This issue's book review is by Renee Lyons, who reviewed a book on stress and culture by Stevan Hobfall. There is also a regular edition of Greg Pierce's *Net News*, as well as a special *Students and New Professionals Column* by Sylvia Niehuis that is dedicated to illuminating issues faced by the legions of neophyte academic job-hunters among our membership.

Finally, continuing our new tradition focusing on the *Lighter Side of Relationships*, Bill Ickes submitted another lovely and mischievous poem, printed on page 1 of the *Bulletin*. Have a joyous spring!

FEATURE ARTICLES

Types or Dimensions of Relating: Taxometrics as a Tool for the Study of Personal Relationships

by R. Chris Fraley
University of California, Davis

Researchers studying personal relationships have long been interested in mapping variation in the kinds of relationships people form, and the ways in which people uniquely approach their relationships. Some of these efforts have focused on the classification of relationships, relationship phenomena, or relationship styles (e.g., exchange orientation, accommodative dilemmas, attachment styles, kinds of relationships, love styles), whereas others have focused on how people differ on continuous dimensions (e.g., intimacy, satisfaction, commitment). Although these different ways of carving nature at its joints may appear to be simply a matter of theoretical taste, they have significant implications for the kinds of questions researchers ask about personal relationships, and the answers they obtain.

Why is the types-versus-dimensions issue important?

Typological and dimensional assumptions have vastly different implications for the kinds of issues researchers investigate, the measurement models they employ, and the conclusions they draw from their data. There are several advantages to using relationship typologies when a typological approach is justified. One such advantage is that people and relationships can be classified within a parsimonious descriptive system. Extraneous sources of variation between people or relationships can be ignored, and similarities between clusters of people or relationships can be emphasized. Second, the investigation of etiology is greatly simplified within a typological approach. When a latent type is responsible for covariation among people or relationships, the search for developmental antecedents is facilitated by focusing on a single, discrete entity (e.g., gene, belief, common experience), rather than multiple causal entities, shared by category members. A third advantage of categorical models is that they allow the derivation of several theoretically useful and intuitive statistics, such as group base rates, group membership probabilities, and indicator sensitivity and specificity rates.

Despite these advantages, categorical systems have several disadvantages when the underlying domain is actually continuous. An important drawback is that categorization results in a substantial loss of measurement precision and statistical power. Dichotomizing a single dimension can lead to a loss in precision equivalent to throwing out 36% of the variance. Second, typological models can introduce conceptual confusion when the domain is better modeled by one or more dimensions. Types are often treated as mutually exclusive categories, but if variation is actually generated by multiple dimensions, more than one classification can apply equally well to an individual or relationship. Third, many typologies are focused on extreme, rather than moderate, regions of dimensional space. When typologies of convenience are constructed, the majority of people (i.e., those within one standard deviation of the mean) are not represented accurately. For example, if a univariate normal distribution is dichotomized, the majority of individuals who fall in the middle will be forced into one of two categories defined in terms of opposites or extremes.

How can we distinguish between types and continua?

Historically, researchers have tested assumptions about taxonicity by examining distributions for signs of bimodality or through the use of cluster analysis. Both of these techniques have serious limitations, however. For example, bimodality is rarely exhibited in the distribution of indicators (i.e., measured or observed variables) even when the indicators are manifestations of a true latent type. Further, cluster analysis finds "types" even when data are generated from a dimensional model. In short, bimodality analyses do not reveal types when they exist, and cluster analysis reveals types when they do not exist.

Fortunately, Meehl and his colleagues have developed taxometric techniques that can reveal the latent structure of a domain (Meehl, 1995; Waller & Meehl, 1997). One advantage of these techniques is that they are based on an explicit model of taxonicity. Specifically, it is assumed that the covariation among indicators is due to the presence of a shared causal entity. Covariation among indicators occurs where there is variation in that entity (i.e., some people have it and others do not). Consequently, there is no covariation among indicators within a group because there is no variation in the entity (e.g., everyone within the group has the gene, belief, or experience).

If one were to order people roughly according to their probability of group membership (i.e., sort them along one of the indicators of the taxon), the indicators would not covary on the high and low ends of the distribution, but would covary moderately in regions of the

distribution that contain an equal mixture of group and nongroup members. Several taxometric techniques, such as L-Mode, MAMBAC, MAXCOV, MAXEIG, and MAXSLOPE, have been developed that exploit this fact. A more in-depth treatment of these techniques is provided by Meehl (1995). For a useful technical volume, which includes code for taxometric programs, see Waller and Meehl (1998). A simple program for MAMBAC and MAXCOV analyses is available from the author (rcfraley@ucdavis.edu).

Carving relational phenomena at their joints

An increasing number of investigators are applying taxometric techniques to the study of interpersonal phenomena. For example, Fraley and Waller (1998) applied taxometric techniques to a large set of adult attachment data to determine whether attachment types exist. Their analyses indicate that, contrary to the prevailing view, variation in adult attachment security is dimensional rather than categorical. Fraley and Waller outline the implications of this finding for understanding the structure, developmental origins, and implications of individual differences in attachment. Haslam and Bornstein (1996) have employed taxometric techniques to study the experience of emotion in close relationships. For example, Haslam and Bornstein showed that jealousy and envy are discrete emotional states.

Although taxometric techniques are relatively new, they are being applied fruitfully to an increasing number of domains in order to answer important theoretical questions. (See Fraley & Waller, 1998, for a brief overview of the application of taxometrics to clinical and personality constructs.) Applying these methods to the study of personal relationships will undoubtedly advance our understanding of the kinds of relationships people form and the ways they characteristically approach those relationships.

References

- Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the typological model. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 77-114). NY: Guilford.
- Haslam, N., & Bornstein, B. H. (1996). Envy and jealousy as discrete emotions: A taxometric analysis. *Motivation and Emotion, 20*, 255-272.
- Meehl, P. M. (1995). Bootstrap taxometrics: Solving the classification problem in psychopathology. *American Psychologist, 50*, 266-275.
- Waller, N. G., & Meehl, P. E. (1998). *Multivariate taxometric procedures: Distinguishing types from continua*. Newbury Park, CA: Sage.