

# FROM THE ORTHOGENIC PRINCIPLE TO THE FISH-SCALE MODEL OF OMNISCIENCE: ADVANCING UNDERSTANDING OF PERSONAL RELATIONSHIPS

**Frank D. Fincham**

*University of Wales, Cardiff*

---

ABSTRACT

---

The field of personal relationships is examined in terms of the developmental processes of differentiation and integration. A need for greater integration is noted, leading to discussion of several issues likely to facilitate development of the field. These include greater attention to describing phenomena studied, properties of relationships, applied research and the role of time in understanding personal relationships. The fish-scale model of omniscience in interdisciplinary research is offered as one means of achieving integration.

KEY WORDS • development • integration • interdisciplinary

---

In recent years much has been written about the emergence of a new field of study devoted to understanding personal relationships. What is meant by such statements? It would be technically incorrect if they referred to the emergence of scientific research on personal relationships as this research began early in the century. The danger in such a view is that it may lead us to overlook the work of earlier scholars (e.g. Lewin, Sullivan, Burgess, Heider, Sears) whose contributions remain rich, often under-utilized, resources for relationship researchers. Instead, the view that a new field of personal relationship research has emerged seems to rest on the development of infrastructure (e.g. professional organizations, specialty journals) over the past 15 years to support an interdisciplinary and explicitly proclaimed field of enquiry variously labeled as the study of 'personal', 'intimate' or 'close' relationships. Although analysis of

---

The author is grateful to Steve Beach and Thomas Bradbury for their comments on an earlier draft of this manuscript. Address correspondence to Frank D. Fincham, School of Psychology, University of Wales, Cardiff, PO Box 901, Cardiff CF1 3YG, UK. [email: fincham@cardiff.ac.uk]

*Journal of Social and Personal Relationships* © 1995 SAGE (London, Thousand Oaks, CA and New Delhi), Vol. 12(4): 523–527.

the historical forces propitious to such a development is beyond the scope of this article, it is clear that a distinct field has been born.

Recent growth in this field is nothing short of astounding and it is conceivable that 'relationship science' may emerge as a separate discipline following the example of such recent interdisciplinary endeavors as cognitive science and neuroscience. The remainder of this article briefly analyzes the current status of the field from a developmental perspective and then uses this analysis as a springboard for identifying issues that have the potential to facilitate development of the field.

### **Current status**

Growth in the field of personal relationships is only a weak index of progress. This is not to suggest that it is unimportant. On the contrary, it has proved critical to the development of infrastructure in this field. However, growth (in the present case more researchers, organizations, publication outlets, etc.) is not synonymous with development. Organismic theories of development remind us, in one form or another, of Heinz Werner's orthogenic principle that development involves increasing differentiation (e.g. the embryo begins as a single unit which separates into different organs) and integration (e.g. regulatory centers/systems coordinate the functioning of the organs). Although this principle can be applied only metaphorically to the field of close relationships, the position taken in the present article is that growth alone is insufficient to ensure success in understanding personal relationships. Assuming that success over the longer term rests on both differentiation and integration, the current analysis begins by examining personal relationship research in developmental terms.

Differentiation proceeds apace in research on personal relationships. For example, semi-distinct literatures have emerged for different relationship types and there is even a tendency towards disciplinary insularity within the study of each relationship type. Similarly, an increasing number of methodologies has emerged for studying relationships though their use is often confounded with disciplinary approach and relationship type. Finally, increased differentiation is evident in the infrastructure of the field.

By itself, differentiation simply leads to balkanization. For optimal development integration is also necessary. Before the establishment of personal relationships as a distinct field of enquiry, Hinde (1979: 7) noted that 'anyone examining the literature on interpersonal relationships cannot fail to be struck not only by the diversity of theoretical and methodological approaches used in their study, but also by the dearth of attempts to integrate them'. The diversity is even greater today and the need for integration apparently just as great. But, as Berscheid (1994: 80) notes, because phenomena are rarely investigated across different relationships 'it is difficult to conceptually integrate relationship research'. By itself this is not problematic for integration can take place at many levels.

Even within focused areas of research, however, there appears to be limited integration. For example, Clark et al. (1994: 230) point out that programs of research on cognition in close relationships 'seem largely independent of one another'. In a similar vein, there is little evidence that Clark & Reis's (1988) call for integrating experimental and correlational (individual difference/psychometric) approaches has been heeded. It seems therefore that the long-term

well-being of the field of personal relationships is critically dependent on an emerging round of integrative theorizing that can provide unifying themes across disciplines and methodologies.

### **Developmental prospects**

In light of the preceding brief analysis, four issues are discussed that might foster greater integration/development in the field of personal relationships.

#### **Phenomena**

Some time ago Duck noted that 'For too long we have been prepared to erect large and complex theories of relationship development without having the data base on which such theories should depend' (1980: 117). Despite notable exceptions, this observation remains pertinent in the sense that relatively few theories have emerged from systematic description and empirical documentation of phenomena in relationships. There is, no doubt, an important role for research that sets out to examine the utility of theory developed elsewhere for understanding personal relationships. To the extent that a data base to support the theory is established, the origin of the theory assumes less importance.

But it also behoves us to remember Einstein's (1934: 4) observation that 'the world of phenomena uniquely determines the theoretical system'. What are the phenomena (carefully described and systematically replicated) that we study in personal relationships? My impression is that we have not done as well as we should have in describing the phenomena we study and that greater attention to this issue will do much to enhance systematic, cumulative knowledge and will further development of integrative theory and research.

#### **Relationships qua relationships**

As we carefully document phenomena we need to be mindful of attending to the essential properties of relationships and to phenomena that may be unique to relationships. Hinde (1979) offers a thoughtful analysis of the properties of relationships that appears to have gone relatively unnoticed. Simply following up on several of his observations (e.g. that behavior in relationships is goal directed, that some concept of anticipation or expectancy is central to describing such behavior, that the course of relationships is shaped by what partners think and feel between interactions) would open up areas of enquiry that have received little or no empirical attention.

Of equal importance is attention to phenomena that may be emergent properties of a relationship and hence transcend understanding that emerges from study of each individual in the relationship. Although somewhat dated, the observation that 'most theory building in the study of relationships has started with propositions derived from studies of individual behavior' (Hinde, 1979: 9) still has an element of truth to it. However, it is critical to note the dramatic progress made in recent years with the emergence of advances such as lag sequential analysis and the social relations model that capture relationship properties *per se*. Lest it appear otherwise, these comments do not imply that emergent properties of relationships have a privileged status. No level of analysis should be pursued to the exclusion of any other for complete understanding requires both analysis (breaking down into smaller units) and synthesis (integration of smaller units of larger units).

**Applied problems**

Analysis of relationship components is often favored in the literature which is understandable given the premium placed on 'basic' research in some disciplines (e.g. psychology). This emphasis is potentially unhealthy and is ironic on two counts. First, in the natural sciences that some disciplines seek to emulate, many of the most important and dramatic advances (e.g. the splitting of the atom) occurred through the study of applied problems. Second, research on personal relationships has applied origins and emerged as a result of the problems faced by families at the turn of the century.

Greater attention to applied problems in personal relationship research has the potential to further its development. Attention to such problems demands bringing to bear on the problem whatever will yield its secrets. This almost always requires crossing disciplinary boundaries, pluralism of methodology and the integration of diverse viewpoints/materials. The gains for understanding relationships are apparent from such examples as Patterson's work on families with aggressive pre-adolescents and Gottman's work on marital dysfunction/divorce. These observations are not an endorsement of applied research to the exclusion of other types of research but rather a plea for greater attention to applied problems.

**Time**

As any clinician knows, working with applied problems reminds us of the truism that relationships exist in time. This truism has profound implications for understanding relationships. Research spanning very short periods of time has significantly advanced understanding of couple interactions. Despite these gains, however, we have very little empirical information linking intrapersonal factors (thoughts/feelings) to specific behaviors even though few dispute the view that how a person responds to his or her partner's behavior depends on the interpretation of the behavior.

Research examining longer periods has similarly led to strides in understanding relationships. But again critical elements are missing. We know virtually nothing about the impact of particular interactions on subsequent ones, very little about patterning across interactions, the interplay between interaction and social context, the role of inter-interaction thought and emotion in shaping interaction and so on. The large, and growing, number of longitudinal studies is healthy for understanding relationships as dynamic entities. However, their value diminishes to the extent that they focus on static elements of relationships across time: photographs at different time points are informative but less so than video clips. Finally, many of us are well equipped to study 'static' dependent variables (e.g. mean scores) but we are less comfortable analyzing variability (e.g. variances) as a dependent variable. The challenges posed by time have the potential to unite researchers to produce the kind of integration that seems necessary for development in the field.

**A cautionary note**

It would be erroneous to conclude from the observations made in this section that the diversity of the field is a problem. On the contrary, it is an index of its vitality and, for the moment, a very healthy sign. Nonetheless, it has the potential to be a cause for concern if such differentiation continues with limited integration. Some integrative glue is needed if the field is to avoid complete splintering to the point where it will cease to exist as an entity.

Granting the need for integration in personal relationships research, how

can it be realized? It is easy to infer that researchers need to strive towards the ideal of the Renaissance scholar. Not so. Even the notion of unidisciplinary competence is a myth; scholars are usually competent with a narrow specialty rather than the discipline as a whole. As a result, interdisciplinary integration is a realistic goal only when it is a collective product and not something embodied in individuals (Campbell, 1969). Campbell's fish-scale model of omniscience in interdisciplinary research seems more appropriate — each individual is akin to a fish scale possessing a unique specialty with the combination of partially overlapping fish scales leading to omniscience.

Such a view of integration does not relieve us from examining our individual actions. As noted earlier, integration can be achieved at many levels. At the very least it behoves us to be mindful of, and to consider building on, the advances of other researchers examining similar phenomena to those we study, a circumstance that is not always evident in published research.

### Conclusion

The perceptive reader will note that few, if any, of the observations offered in this article are original and herein lies the heart of the matter. The major thrust of the article can be summarized by two statements. First, to the degree that we ignore existing analyses of personal relationships, we risk reinventing the proverbial wheel; a cumulative science of personal relationships must build on past scholarship and there is much available to direct and inform future research efforts. Second, the current call for integration echoes earlier calls for integration (e.g. Duck, 1980; Hinde, 1979); how much longer can we afford to ignore such calls? There appears to be an emerging sense of the need for integration within some subdisciplines (e.g. social psychology) and this zeitgeist will hopefully foster integrative efforts that will facilitate the development, and not simply the growth, of scholarship on personal relationships.

### REFERENCES

- Berscheid, E. (1994) 'Interpersonal Relationships', *Annual Review of Psychology* 45, 79–129.
- Campbell, D.T. (1969) 'Ethnocentrism of Disciplines and the Fish-scale Model of Omniscience', in M. Sherif & C.W. Sherif (eds) *Interdisciplinary Relationships in the Social Sciences*, pp. 328–48. Chicago: Aldine.
- Clark, M.S. & Reis, H.T. (1988) 'Interpersonal Processes in Close Relationships', *Annual Review of Psychology* 39: 609–72.
- Clark, M.S., Helgeson, V.S., Mickelson, K. & Pataki, S.P. (1994) 'Some Cognitive Structures and Processes Relevant to Relationship Functioning', in R.S. Wyer & T.K. Srull (eds) *Handbook of Social Cognition*, vol. 2, pp. 189–238. Hillsdale, NJ: Erlbaum.
- Duck, S.W. (1980) 'Personal Relationships Research in the 1980s: Towards an Understanding of Complex Human Sociality', *The Western Journal of Speech Communication* 44: 114–19.
- Einstein, A. (1934) 'Principles of Research', in *Essays in Science*, pp. 1–5. New York: Philosophical Library.
- Hinde, R.A. (1979) *Towards Understanding Relationships*. London: Academic Press.