

## Designer's Corner

# Drinking Patterns and Problems: A Search for Meaningful Interdisciplinary Studies<sup>1</sup>

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This paper outlines an interdisciplinary framework for conducting research on drinking patterns and problems, reflecting a social-ecological perspective on person-environment interactions (Stokols, 1996). The sheer volume of existing alcohol research precludes a systematic and thorough review of all relevant sources. This paper presents a set of arguments about implicit disciplinary and methodological assumptions that have slowed the development of meaningful interdisciplinary approaches to research on drinking patterns and problems. The longer online version of the paper presents these arguments in detail and outlines basic elements of a conceptual framework for research that involves three central constructs studied at four levels of analysis and incorporating three distinct methodological perspectives. That version presents selected empirical studies and theoretical statements with reference to the coordinates provided by these dimensions.

### **Problems in Formulating an Interdisciplinary Conceptual Framework**

#### ***Implicit Assumptions About Appropriate Levels of Analysis***

One prominent approach to the study of drinking patterns and problems emphasizes the occurrence, distribution, and determinants of alcohol use and its consequences in *populations*. This tradition imports collectivist assumptions from epidemiology and sociology by using national-, regional-, and community-level measures of drinking patterns and problems. Several traditions within this approach can be identified, each adopting its own measurement strategies for assessing drinking patterns and problems (Babor, 1990). For example, Grant (1993) distinguishes among three epidemiological perspectives on population-level drinking phenomena. From the perspective of *psychiatric epidemiology*, discrete or categorical measurement strategies are used to classify populations with

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<sup>1</sup>A longer, more detailed version is published in CJNR online at [www.ingentaselect.com](http://www.ingentaselect.com)

reference to alcoholism, alcohol dependence, and other psychiatric diagnostic categories. This perspective has led to the development of interview schedules designed to identify alcohol-use disorders as defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the ICD systems. The several prominent measures developed within this perspective include the Alcohol Use Disorders and Associated Disabilities Interview Schedule (AUDADIS; Grant & Hasin, 1990) and the Diagnostic Interview Schedule, Alcohol Module (DIS-III-R; Blouin, Perez, & Blouin, 1988). From the perspective of *psychosocial epidemiology*, dimensional rather than categorical measurement strategies are used to classify populations in terms of mental health, including alcohol-use disorders. This perspective relies heavily on the psychometric tradition imported from psychology, which emphasizes reliability and internal consistency of items purporting to measure alcohol-related disorders. Finally, *epidemiologic sociology* developed in part as a response to problems inherent in defining alcoholism as a disease entity, and in response to the notion that drinking problems are too diverse to be described as part of a single disease construct. This approach emphasizes constructs as volume of drinking (Skog, 1991), along with frequency, usual quantity, and variability of consumption (Edwards, Gross, Keller, & Moser, 1976; Rehm, 1998; Straus & Bacon, 1953) and alcohol problems (Rehm, Frick, & Bondy, 1999).

Another tradition in the study of drinking patterns and problems emphasizes the psychosocial characteristics of *individuals*. This tradition imports individualistic assumptions from biology and psychology by using person-centred measures of the traits, thoughts, and motives associated with drinking patterns and problems. Included in this tradition are research on genetic influences on alcoholism and alcohol problems (Merikangas, 1990) and studies of personality influences (e.g., sensation-seeking, behavioural under-control) on drinking patterns and problems (Galen, Henderson, & Whitman, 1997; Howard, Kivlahan, & Walker, 1997; Martin & Sher, 1994; Pedersen, 1991; Pedersen, Clausen, & Lavik, 1989; Sher, 1991). Research on alcohol expectancies (Christiansen, Goldman, & Inn, 1982; Christiansen, Smith, Roehling, & Goldman, 1989; Goldman, Brown, & Christiansen, 1987) and motives for using alcohol (Cooper, 1994; Cooper, Frone, Russell, & Mudar, 1995) also rest on explicitly individualistic assumptions about how drinking patterns and problems arise.

Thus, the extent to which researchers adopt disciplinary assumptions about the "reality" of the individual (a physiological and/or psychological perspective) or the "reality" of populations (a sociological and/or epidemiological perspective) constrains the type of variables included in the-

oretical models of drinking patterns and problems. In order to bridge these diverse disciplinary traditions, we need a conceptual framework for the study of drinking patterns and problems that can accommodate both individual (person-level) and aggregate (social-group) variables and that allows for integration across studies.

### ***Implicit Assumptions About Methodological Emphasis***

Alcohol researchers also import implicit disciplinary assumptions from parent disciplines in the health and social sciences about the value of different methodological perspectives for use in studies of drinking patterns and problems, in particular the role of descriptive and explanatory methodological perspectives. This manifests as a tension between empirical studies that attempt to *enumerate* drinking patterns and problems using existing instruments and studies that attempt to *explain* how drinking and associated problems dynamically occur. Because these methodological issues have not been extensively discussed in the literature, researchers have not yet taken a clear position on the relative emphasis of description or explanation required in empirical work. This situation has impeded the development of an interdisciplinary framework for studies of drinking patterns and problems.

On the one hand, research on drinking patterns and problems could set a descriptive methodological goal for empirical studies. However, within the domain of descriptive studies, alcohol researchers have been slow to address the question of whether research should emphasize an objective, third-person (in anthropological terms, an *etic*) perspective, or a subjective, first-person (or *emic*) perspective on drinking patterns and problems. On the other hand, alcohol research could set an explanatory methodological goal for empirical studies. This would be reflected in the position that the essential aim of research is to provide natural-scientific causal explanations (Hempel, 1966) and would be manifested in quantitative studies that attempt to predict specific types of drinking patterns and problems.

Lack of clarity on the relative roles and importance of descriptive (whether third- or first-person) and explanatory research methodologies has led to a proliferation of studies on drinking patterns and problems that are not easily reconciled or integrated. Some investigators use objective techniques (economic analyses, social surveys, quantitative analyses) to describe the distribution of alcohol consumption in populations (Skog, 1980, 1985) or to explain drinking patterns and problems (Gruenwald, Treno, Taff, & Klitzner, 1997; Holder, 1998; Midniak, Tam, Greenfield, & Caetano, 1996; Rehm et al., 1996). Others use more interpretive techniques (key-informant interviews, ethnography, focus groups,

interpretive analyses) to characterize how people, communities, and cultures view drinking patterns and problems (e.g., Heath, 1993; Single, 1997). In practice, there has been little attempt to reconcile or integrate studies across these diverse methodological goals and strategies. In order to bridge disciplinary traditions, we need a conceptual framework for the study of drinking patterns and problems that can accommodate methodological pluralism and provide guidance in the timing and relative importance of descriptive, explanatory, qualitative, quantitative, third- and first-person methods.

### **Towards an Interdisciplinary Conceptual Framework: General Dimensions**

An interdisciplinary approach to drinking patterns and problems will require theory and research situated at four distinct levels of analysis — intra-individual, inter-individual, community, and national — studied from three complementary methodological perspectives: enumeration studies designed to identify consumption and consequences using established instruments, descriptive studies designed to enhance the measurement of constructs in the field, and explanatory studies designed to test theories about how drinking patterns and problems arise. Beyond these general conceptual and methodological principles, empirical research on drinking patterns and problems would benefit from the articulation of a set of fundamental *constructs* that require systematic investigation. Three constructs provide conceptual reference points for empirical studies in the area as well as categories of theories and variables: (1) alcohol consumption, (2) consequences of drinking, and (3) problem identification. When these three substantive constructs in studies of drinking patterns and problems (consumption, consequences, problem identification) are crossed with the proposed four levels of analysis (national, community, inter-individual, intra-individual) and three methodological perspectives (enumeration, description, explanation), the result is a three-dimensional interdisciplinary framework for alcohol studies.

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