A communal coping model (CCM) of the relation between catastrophizing and pain is of interest because it challenges a number of previously held assumptions about how individuals cope with pain. The traditional perspective has been that coping efforts are mobilized to reduce the physical and emotional discomfort associated with pain. The CCM suggests that pain reduction may not always be the primary goal of coping, and that for some individuals, interpersonal goals may characterize many of their coping efforts. Within this conception, catastrophic thinking is not simply a maladaptive form of responding that contributes to heightened pain experience, but it is also a part of a broader interpersonal orientation to coping with distress. Sullivan et al. (2001) suggested that high catastrophizers might engage in exaggerated expression of their pain as a means of maximizing social proximity and support.

The CCM was proposed as a heuristic to encourage exploration of the interpersonal correlates and social contextual factors associated with pain experience. Although the model is not a fully developed theory, a number of studies have recently been conducted that have purported to provide tests of the CCM. The results of these studies might be better viewed as data that contribute to elaboration or refinement of the CCM than as specific tests of predictions derived from the model.

The Giardino et al. (2003) study is another contribution to the empirical literature on the CCM. Their results suggest that the relationships between catastrophizing and pain can be a function of characteristics of individuals in the social environments of pain patients. Although their research did pertain to interpersonal factors and the relation between catastrophizing and pain, it did not address the communicative or support seeking dimensions, which are integral to the CCM in its original conception. Instead, Giardino et al. appealed to operant principles to account for their findings. The implications of this alteration in theoretical emphasis are not clear, because the empirical consequences of this and other theoretical issues are not easily specified within current formulations of the CCM. Theory testing calls for a more explicit statement of the CCM constructs and their interrelationships than is currently available.

As a start toward increased formalization of the CCM, a simple model, which is shown in Fig. 1, was constructed to describe the data and theorizing of Giardino et al. Constructs are represented by rectangles, and hypothesized explanatory relationships are specified as paths (arrows) from one construct to another (Jöreskog and Sörbom, 1996). The model in Fig. 1 shows standardized path coefficients from a path analysis of the data provided in Tables 2 and 3 of Giardino et al.’s paper. The model fits the Giardino et al. data very well, and the predicted and actual covariance matrices do not deviate significantly, \( \chi^2 (3, N = 74) = 2.27, p > 0.50 \). All paths in the model are significant \( (p < 0.05) \).

The model in Fig. 1 is not intended to resolve the theoretical issue of social communication versus social reinforcement, but it does make distinctions that are relevant to theory and to the Giardino et al. research. The model distinguishes between perceived pain intensity (PAIN_S) and the affective concomitants of pain (PAIN_A), and it makes explicit the separation between catastrophic thinking (CAT_T) and catastrophizing behaviors (CAT_B). Also explicit in the model are causal hypotheses regarding solicitousness (of spouse or caregiver) and its relationship to catastrophizing and pain. Because Giardino et al. assessed solicitude from the point of view of the patient, it is designated as ‘PT_SOL’. Although CAT_B was not measured by Giardino et al. it is included, as a dotted rectangle, because of its importance to this commentary.

The proposed model makes explicit some of the theoretical assumptions and hypotheses from the Giardino et al. study, and it offers what is perhaps a clearer picture of some of their results. For example, the model indicates that the effects of PT_SOL on reported pain are largely mediated through CAT_T, but PT_SOL also has a direct effect on PAIN_A. Although the model does not include the interactions explicitly, the thick lines indicate the paths that were affected by interactions in the causal determination of PAIN_S and PAIN_A from CAT_T. According to the Giardino et al. results, the mediating influence of CAT_T is moderated by other variables (i.e. relationship type for PAIN_S and PT_SOL for PAIN_A).

Although the proposed model does not offer a test of the social reinforcement (operant) conception of the CCM, it does provide a framework for discussion. One inference from the operant model could be that relationships between perceived solicitousness and catastrophizing behavior are more important than relationships between perceived solicitousness and catastrophizing thoughts. It is possible, for example, that the punishing behavior of a spouse could...
reduce CAT_B without affecting CAT_T and that rewarding CAT_B with solicitousness could increase CAT_B without changing CAT_T, PAIN_S, or PAIN_A. In the social communication version of the CCM, hypotheses regarding the associations between CAT_T and CAT_B might well be different from those based on the social reinforcement perspective. However, both social communication and social reinforcement need more rigorous statements of theory before empirical comparisons can be made. Moreover, validated measures of other constructs, such as CAT_B, may be necessary to provide adequate comparisons of the two explanatory mechanisms.

The proposed model in Fig. 1 is intended only to exemplify a possible approach to formalizing communal coping theory, but any small step toward a more rigorous theory could be important. Catastrophizing has emerged as one of the most robust psychological predictors of pain outcomes. Yet, several investigators have commented that catastrophizing has traveled through the world of pain as a theoretical orphan. The CCM offers promise of filling some of that theoretical void, but further advances in understanding catastrophizing within its social context will require specification of a comprehensive theoretical model. Without a theory that can explain current results and generate clearly testable hypotheses, research in this area runs the risk of generating a body of literature that will ultimately confuse more than it will enlighten.

References


B.E. Thorn*
L.C. Ward
M.J.L. Sullivan
J.L. Boothby
Department of Psychology,
University of Alabama, P.O. Box 870348,
Tuscaloosa, AL 35487, USA
E-mail address: bthorn@bama.ua.edu

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