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Psychological Factors in the Development and Natural History of Functional Gastrointestinal Disorders

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The theory of stress and coping proposed by Lazarus and Folkman (1) is useful in understanding why some children adapt to functional gastrointestinal disorders (FGIDs) and others become increasingly incapacitated. In applying this theory to FGIDs, we make the assumption that abdominal pain is a stressor. According to Lazarus and Folkman, the personal meaning we attach to an event—in this case, an episode of abdominal pain—shapes our emotional and behavioral responses to the event. Given the same event, some people will anticipate harm, feel threatened, and try to escape the situation. Other people facing the same event will anticipate mastery, feel challenged, and take action to confront the situation. Applying this formulation of stress and coping to abdominal pain, we would expect that children's pain appraisals and coping strategies would contribute significantly to their course of illness. Indeed, our prospective study of pediatric patients with chronic abdominal pain showed that those who felt most threatened by pain used passive coping strategies and had poor outcomes, whereas those who accepted pain and used accommodative coping strategies had more positive outcomes (2). Thus, whether children's mastery efforts in confronting pain are negative, characterized by perceived threat and avoidance of situations associated with pain, or positive, characterized by perceived challenge and direct action, significantly influences their course of symptoms and disability.

At times of stress, people may rely both on their own mastery efforts and on their social network. Thus, it is not surprising that children's social relationships also influence the course of pediatric FGIDs (3–6). Interpersonal relationships associated with pain can be positive, characterized by support, or negative, characterized by isolation. Recent research shows that the quality of children's mastery efforts and interpersonal relationships define 4 profiles of children with chronic abdominal pain (7), as illustrated in Fig. 1.

Avoidant copers are characterized by poor pain mastery efforts and withdrawal from interpersonal relationships when dealing with pain. They view their abdominal pain as serious and themselves as powerless. They avoid others and tend to be depressed and incapacitated by pain. Over time, their withdrawal from activities may lead to problems of academic and social adjustment.

Dependent copers are similar to avoidant copers in that they make little effort to master pain themselves. However, whereas avoidant copers withdraw from others, dependent copers seek social support. Indeed, their helplessness and catastrophizing about pain may elicit support from others that reinforces their disability. To the extent that they are incapacitated by pain, these children may fall behind their peers in academic and social domains.

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Self-reliant copers are characterized by high pain mastery efforts and refusal of assistance or sympathy from others. These patients are stoic; they attempt to master pain without letting others know that they are suffering. Because they continue their activities, their social and academic adjustment is not affected by pain. Stoicism exacts an emotional cost (8), however, which is reflected in depressive symptoms in some of these patients.

Engaged copers are characterized by both positive mastery efforts and positive interpersonal relationships associated with pain. They engage in active problem solving and self-encouragement. In addition, they engage in social relationships and seek support in coping with pain, but are not dependent on others. These patients accommodate their pain and, as a consequence, continue to develop their social and academic competence. Of the 4 profile groups, engaged copers exhibit the most resilient, adaptive response to pain.

By assessing children's mastery efforts and interpersonal relationships associated with abdominal pain, practitioners can identify those who are likely to have poor outcomes and may need more extensive medical follow-up as well as referral to behavioral health providers.

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		PAIN MASTERY	
		Positive	Negative
RELATIONSHIPS	Positive	Engaged Copers	Dependent Copers
	Negative	Self-Reliant Copers	Avoidant Copers

FIG. 1.
Patient coping styles vary by pain mastery efforts and interpersonal relationships associated with pain.