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Somatic complaints and health care use in children: Mood, emotion awareness and sense of coherence

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Abstract

In this study, we compared several aspects of the emotional functioning of schoolchildren reporting very few somatic complaints ($n = 59$), schoolchildren reporting many somatic complaints ($n = 61$), and a clinical group of children with functional abdominal complaints who visited the outpatient clinical of the VU University Medical Centre in Amsterdam ($n = 33$). The children had an average age of 10.6 years. We studied whether general moods (happiness, anger, fear, and sadness), symptoms of depressiveness, emotion awareness, and sense of coherence contributed to group classification. Eighty-three percent of the schoolchildren reporting very few somatic complaints were identified correctly on the basis of better emotional functioning. However, there was little difference in the emotional functioning of schoolchildren with many somatic complaints and that of the clinical group. We concluded that the variables studied are valuable for differentiating children who are troubled by somatic complaints from children experiencing few somatic complaints. The results stress the existence of emotional problems in children reporting many somatic complaints.

Keywords: Somatic complaints; Mood; Emotion awareness; Sense of coherence; Children; The Netherlands

Introduction

Somatic complaints, like abdominal pain and headache, are common in children (Perquin et al., 2000; Petersen, Bergstrom, & Brulin, 2003; Roth-Isigkeit, Thyen, Raspe, Stoven, & Schmucker, 2004). Moreover, there seems to be an increase in prevalence of somatic complaints during early childhood, (Perquin et al., 2000; Ramchandani, Hotopf, Sandhu, Stein, & ALSPAC study team, 2006) with a peak in middle childhood and early adolescence (Perquin et al., 2000), which is accompanied by an increase in health-care utilization (Roth-Isigkeit et al., 2004). However, a medical cause for these complaints is rarely found (Croffie, Fitzgerald, & Chong, 2000; Roth-Isigkeit et al., 2004). Furthermore it has consistently been shown that negative moods are related to more somatic complaints (Campo et al., 2004; Dorn et al., 2003; Egger, Costello, Erkanli, & Angold, 1999; Rieffe, Oosterveld, & Meerum Terwogt, 2006). These findings indicate that children's emotional functioning is

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related to somatic complaints. Nevertheless, the current knowledge about the emotional functioning of children with somatic complaints is rather limited, especially concerning differences between children that receive medical health care and peers with many somatic complaints from a non-clinical population. The aim of the current study was twofold. The first objective was to provide more knowledge about differences in the emotional functioning of children who report many somatic complaints compared to children who report few somatic complaints. The second objective of this study was to find out whether children in a clinical (medical) population can be discriminated from peers in non-clinical populations by certain aspects of their emotional functioning. This information can be helpful in adjusting existing treatment programs, but also in the prevention of somatic complaints and perhaps even in the prevention of fruitless medical examinations.

The finding that psychological factors are related to somatic complaints can be understood from a biopsychosocial perspective. Somatic changes are thought of as a key component of emotional or affective experiences. Damasio even argues that emotional states are defined by: ''changes within the body proper, e.g., viscera, internal milieu, and within certain sectors of the brain, e.g. somatosensory cortices; neurotransmitter nuclei in the brain stem'' (p. 84, 1998). The biological changes (or their representation in the central system) are considered as essential for adaptive behavior, decision making, and learning. More elaborate information on the neurological and bodily responses to aversive events can be found elsewhere (e.g., Carrasco & Van de Kar, 2003; Damasio, 1998; Tsigos & Chrousos, 2002). What is relevant to the current context is that the emotional neuro-physiological reactions can also give rise to somatic complaints: In the long run, these changes can cause organic dysfunction, for instance in the gastrointestinal system, (Bhatia & Tandon, 2005) and suppression of the immune system (Segerstrom & Miller, 2004).

Which coping strategies are adaptive will obviously depend on characteristics of the emotion evoking situation for instance whether the outcome can be controlled or not (Fields & Prinz, 1997). In the current study we did not focus on the type of coping strategies children use, but instead focused on two aspects of children's emotional functioning that might promote inefficient coping.

First, we looked at the *appraisal* component of negative situations. The extent to which negative situations are appraised as stressful and uncontrollable is reflected in a low 'sense of coherence' (Antonovsky, 1993), which refers to difficulty with understanding the meaning of situations, making sense of them and controlling them. Previous study results show that people perceiving a strong sense of coherence report better mental health (such as less depression and anxiety) and better physical health (Geyer, 1997; Pallant & Lae, 2002). Although the strength of the relation between sense of coherence and measures of mental health has raised questions about overlap of constructs in the past (e.g., Geyer), more recent results have proven that sense of coherence is an independent construct (Cohen & Savaya, 2003). Nevertheless, no study has yet been conducted to determine whether children with many somatic complaints appraise negative situations as stressful and uncontrollable. It is sometimes assumed that sense of coherence does not reach stability until the age of approximately 30 (Torsheim, Aaroe, & Wold, 2001). Therefore, sense of coherence measured in children may be less trait-like. However, this does not mean that sense of coherence has less influence on children's health.

Second, a precondition for efficient coping is an adequate *understanding* of the emotional experience. After all, incomplete or incorrect understanding limits the possibilities of finding a suitable solution, even when appropriate strategies to accomplish that solution are in principle available to the child. For instance, when own emotional states are not acknowledged, the possible emotion-focused solutions—strategies that enable you to improve your mood state even when the problem itself cannot really be altered—will be ignored as well. In 1973, Sifneos noticed that his patients with somatic complaints had difficulty putting their emotions into words, which he called 'alexithymia'. Today it has consistently been demonstrated that poor emotion awareness (difficulty recognizing and analyzing emotions) is related to more somatic complaints in adults as well as in children in a normal population (De Gucht, Fischler, & Heiser, 2004; Grabe, Spitzer, & Freyberger, 2004; Rieffe et al., 2006). However the emotion awareness of children in a clinical, medical population has not yet been studied.

In this study we compared the moods, symptoms of affective disorder (depression), sense of coherence and emotion awareness of three groups of children: children visiting a hospital outpatient clinic because of abdominal complaints, regular school children