

ORIGINAL ARTICLE

The biopsychosocial model in paediatric clinical practice—An interdisciplinary approach to somatic symptom disorders

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Abstract

Aim: The paper aims to show how the biopsychosocial (BPS) model can be applied as a clinical method and guide the assessment and treatment of children and adolescents with somatic symptom disorders (SSD).

Methods: Based on relevant literature and our clinical work with children and adolescents with SSD, we have developed a method to ensure a structured, interdisciplinary examination of biological, psychological and social factors, operationalising the BPS model into a clinical method.

Results: The BPS model renders assessment and treatment of complex conditions as a basis for evaluating phenomena not confined by diagnostic tools, but still includes all information from these tools. It requires an interdisciplinary approach, giving individual patient and caregivers a central position. A thorough medical examination is required as a starting point for assessments. Good results rest upon a shared understanding between patient, caregivers and professionals.

Conclusions: 'Biopsychosocial' is often claimed as a basis for clinical work with complex cases, medical, functional and psychiatric, but scarcely with a corresponding BPS method or practice. The BPS method should guide further development of holistic, interdisciplinary health care on all levels, to assess and help children and adolescents with SSD.

KEYWORDS

biopsychosocial model, clinical method, functional somatic symptoms, interdisciplinary paediatric practice, medically unexplained symptoms, somatic symptom disorders

1 | INTRODUCTION

With the biopsychosocial (BPS) model, internist and psychiatrist George L. Engel laid the foundation for a broader and more integrated understanding and treatment for all diseases, both biological and psychiatric.^{1–3} The term 'biopsychosocial' is still widely used, also

in modern interdisciplinary paediatric medicine. A literature search conducted on the Medline (PubMed) database (2022-01-29) under the search terms 'biopsychosocial and children' and 'biopsychosocial and adolescence' revealed, however, that the concept of 'model' is downplayed in favour of more general terms such as 'framework', 'perspective' and 'factors'.

Abbreviations: BPS, biopsychosocial; SSD, somatic symptom disorders; ACE, adverse childhood experiences; GP, general practitioner; CAMHS, child and adolescent mental health services.

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In our clinical practice, we meet children and adolescents with severe somatic symptoms, where, despite broad medical investigation, no single medical cause has been found to fully explain the symptoms. The symptoms have adverse effects on the patient's physical and psychosocial functioning. Somatic symptom disorders (SSD), also called functional disorders or medically unexplained symptom disorders, are characterised by impairing physical symptoms that are influenced by psychological factors, and are associated with disruptions to education, peer relationships, recreation and family functioning.⁴ Single somatic symptoms are common, and 10% of children and adolescents have more persistent somatic symptoms.⁵ SSD are commonly encountered in paediatric hospital settings. The complexity of the symptoms and possible causal factors requires a broad and systematic approach with regard to both assessment and treatment.⁴

Recent studies describe the diagnostic barriers towards assessment and treatment for paediatric SSD, including the need for a common nomenclature,⁵ as well as the need for standardised, clinical pathways for these patients in the healthcare services.⁴⁻⁷ Over the past decades, there has been a much-needed shift from a biomedical to a more holistic approach to assessing and treating SSD. In a review article, Kangas and colleagues (2020) describe the literature and current issues regarding assessment and treatment of paediatric SSD and provide valuable clinical recommendations for the management of the patient group, based on the BPS model.⁵ Descriptions of the clinical assessment and process of a diagnostic formulation based on the BPS model are, however, only sparingly described in the literature.⁸

Over the past 30 years, we have developed a method in our paediatric clinical practice to ensure the structure and quality of an interdisciplinary examination of medical, psychological and social factors, in line with the BPS model. Patients and parents are admitted to a 1–2 week course of investigations at the Department of Clinical Neuroscience for Children. The interdisciplinary team comprises a paediatrician, psychologist, child psychiatrist, physiotherapist, nurse and a special educator. In addition, relevant subspecialists are consulted.

This article describes a structured use of the BPS model in clinical communication with children and adolescents with SSD and their parents, as a method to achieve a shared and holistic understanding of the patient's symptoms and difficulties. The scientific basis for the BPS model is outlined. Typical features of SSD and the interdisciplinary assessment are presented to describe the clinical method based on the BPS model. Thus, we describe the clinical pathway from the BPS model, to a BPS method and a BPS understanding.

Finally, the clinical relevance of the method in paediatric practice is discussed.

1.1 | BPS model

Engel used schizophrenia and diabetes mellitus as examples of diseases in which biological, psychological and social factors influence the onset and progression of the disease. He draws the scientific

Key Notes

- The term 'biopsychosocial' (BPS) is widely used, but the BPS model operationalised into a clinical method is only sparingly described in the literature.
- The BPS method calls for a structured use of the BPS model, illustrating how biological, psychological and social factors may be understood in relation to each other.
- The use of the BPS method in clinical practice requires close interdisciplinary collaboration and aids a patient-centred approach.

basis for the BPS model from general systems theory developed by Bertalanffy from the theory that living organisms are open systems that enclose and are enclosed by other systems, with which they are in constant communication in a natural hierarchical order.⁹ Thus, the recognition of related processes across different levels of organisation, as the molecules, the cells, the organs, the organism, the person, the family, the society or the biosphere, is a central aspect of the general systems theory (Figure 1).^{1,2}

In this context, the BPS model may be perceived as a subsystem that interacts with social and cultural surroundings and with nature. The development of climate change and the emerging disruptions of the ecosystems poses yet another factor that influences the individual on all levels. Engel underlines that general systems theory's positioning of the individual in the hierarchy, with the corresponding dimensions of humanity, individuality and personhood, should transfer to the patient–doctor and patient–therapist relationship.¹⁰

Connecting processes from the cellular level, via the organs, to the psyche and social environment, the BPS model underlines that healthcare professionals can influence all of these levels through examinations and treatment, both positively and negatively.^{11,12} This implies that iatrogenic factors pose a separate risk in the relationship between patients and the healthcare providers. General systems theory forms the basis for juxtaposing and evaluating psychological and social factors in line with biological data. The structure of the BPS model thus allows for identification and clinical assessment of all illnesses, as it considers the significance of both individual factors and objective measures.

1.2 | The scientific basis

Knowledge of the physiological relationships between the body, emotions/psyche and social environment has been expanded significantly since Engel introduced the BPS model. The adverse childhood experiences (ACE) studies have shown how stressful and traumatic experiences early in life is associated with physical and mental health problems later in life, and more ACE's increases the likelihood of physical and mental health problems.¹³ The nervous system, immune system, hormonal balance and circulatory systems

SYSTEMS HIERARCHY (LEVELS OF ORGANIZATION)

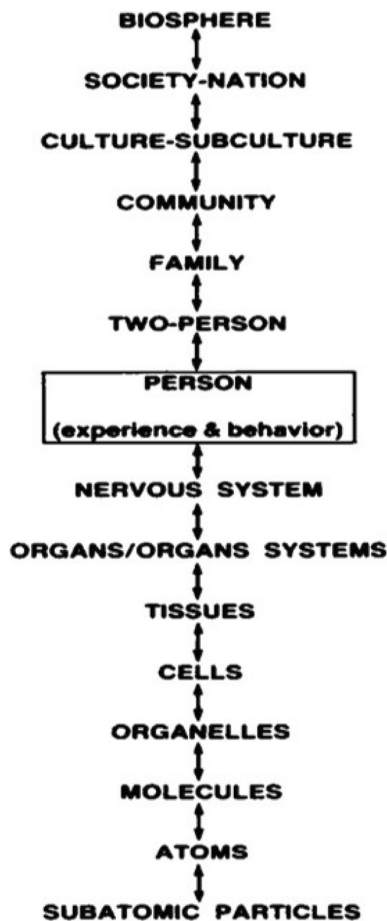


FIGURE 1 Hierarchy of Natural Systems (Engel, 1981)

have both acute and prolonged reactions to psychosocial stress.¹⁴⁻¹⁶ A recent study suggests a dysregulation of the hypothalamic-pituitary-adrenal axis in children with functional neurological disorders.¹⁶ One assumes that biological and genetic factors pose a risk of developing paediatric SSD; as there is found a clustering of SSD in families.¹⁷ Furthermore, one suggests a shared, enhanced biological inclination to experience physical symptoms in a certain way between parent and child. Studies on children with functional abdominal pain showed that the mothers were more likely to report a history of somatoform disorders, as well as anxiety and depressive disorders, than mothers of healthy controls.¹⁸ In line with the findings from the adult literature which suggest a link between SSD and pain sensitisation, there is also found that children with SSD report lower pain thresholds.⁵

The BPS model repeals the principal distinction between biological and psychological processes embedded in the biological disease model, and opens up for a language that describes biological, psychological and social phenomena using the same words and concepts. This gives new access to communication with the patient, for understanding his or her current situation, and for

understanding that illness occurs and persists, but is also healed, in the interaction between biological, psychological and social factors.

1.3 | Somatic symptoms disorders (SSD)

SSD are understood as severe and persistent physical symptoms seen in connection with psychological factors, and may or may not co-occur with a specific medical condition.⁴ Patients may present with symptoms of persistent pain, fatigue or more complex somatic functional symptoms such as convulsions, syncope, paralysis and sensory loss, as reflected in the literature and diagnostic manuals.¹⁹⁻²³ Paediatric SSD is associated with a number of negative psychological and social consequences, such as educational disruptions, social withdrawal, disrupted family functioning and can affect the child or adolescent's developmental trajectory.⁴

These families have often had long-term contact with the healthcare services. Within the current organisation, however, GPs, paediatric wards and child and adolescent mental health outpatient clinics have limited experience with and scope to assess these conditions. Many attempts to help will therefore have failed, and/or exacerbated the symptoms.

For the patient and the family, it is natural to believe that all physical symptoms—including functional somatic symptoms—have a medical cause. However, the healthcare services often fail to offer sufficient investigation and treatment, and patient and parents are—at best—left with a tentative explanation for some of the symptoms. The fact that SSD cannot be fully explained on the basis of an organic aetiology leaves these patients in a kind of limbo. They may have been told that the symptoms have 'psychological causes', in the absence of a shared understanding.²⁴ At the same time, the patients may also be rejected by the local child and adolescent mental health services (CAMHS), because the symptoms do not meet the diagnostic criteria for psychiatric assessment and treatment. Questions regarding possible causes may be manifested as guilt and a sense of failure in combination with exhaustion, frustration and despair in the family system. These emotions, together with thoughts and beliefs concerning severity and significance of the symptoms, thus have to be addressed.⁶

2 | METHODS. THE BPS MODEL APPLIED TO CHILDREN AND ADOLESCENTS WITH SSD IN A PAEDIATRIC SETTING

2.1 | Assessment

The value of an assessment is expressed by the extent to which the patient and their parents feel understood and taken seriously, as well as the understanding gained by the family regarding follow-up and treatment. In our hospital setting, we see the importance of competent

investigations, assessment and evaluations by professionals from all relevant disciplines (Figure 2). Each healthcare professional must balance the family's psychosocial resources and understanding of the symptoms on the one hand, and the professional aspects on the other.

A thorough medical workup is fundamental to create a sense of certainty and confidence for the patient and parents, who might otherwise worry that some unidentified physical condition is missed. The patient is therefore admitted to a medical ward, usually paediatric neurology or gastroenterology inpatient ward.

After a comprehensive physical examination and appropriate investigations, the patient and family are welcomed to an interdisciplinary admission meeting, underlining the importance of interdisciplinary collaboration. The patient and parents are briefly informed about the BPS model and its potential to sort and understand relations and interactions between body, thoughts, feelings, and of what is going on within the family, among friends and at school. The parents are asked to describe the child's positive qualities and resources; as the bearing elements of their life, now and in the future. The patient and the family's understanding of the symptoms and their expectations of the assessment are explored.

Family history, development and status in all areas of life are examined in family consultations with a psychologist and child psychiatrist.

The following days, the child or adolescent undergoes psychological and cognitive assessment. Information from the home school is necessary. A neuropsychologist is consulted when necessary. Physiotherapeutic investigation is a cornerstone of the physical element of the biopsychosocial assessment. A pain specialist is engaged, when relevant. Supplementary medical examinations are conducted, where necessary.

The interdisciplinary team meets regularly during the course of the assessment, with and without the family.

At the end of the assessment, the interdisciplinary team conveys a summary of the evaluations and recommended interventions. This is usually the point, at which the patient and family experience a broader, more holistic understanding of the symptoms.

2.2 | Interview

Patients with SSD seek help for physical symptoms that cannot be explained by a disease process, and both patient and parents link the functional decline to these symptoms. As a consequence, the issue of how and when the symptoms started often comes to dominate at the beginning of the assessment. Healthcare professionals must respectfully acknowledge the significance of the physical symptoms and the

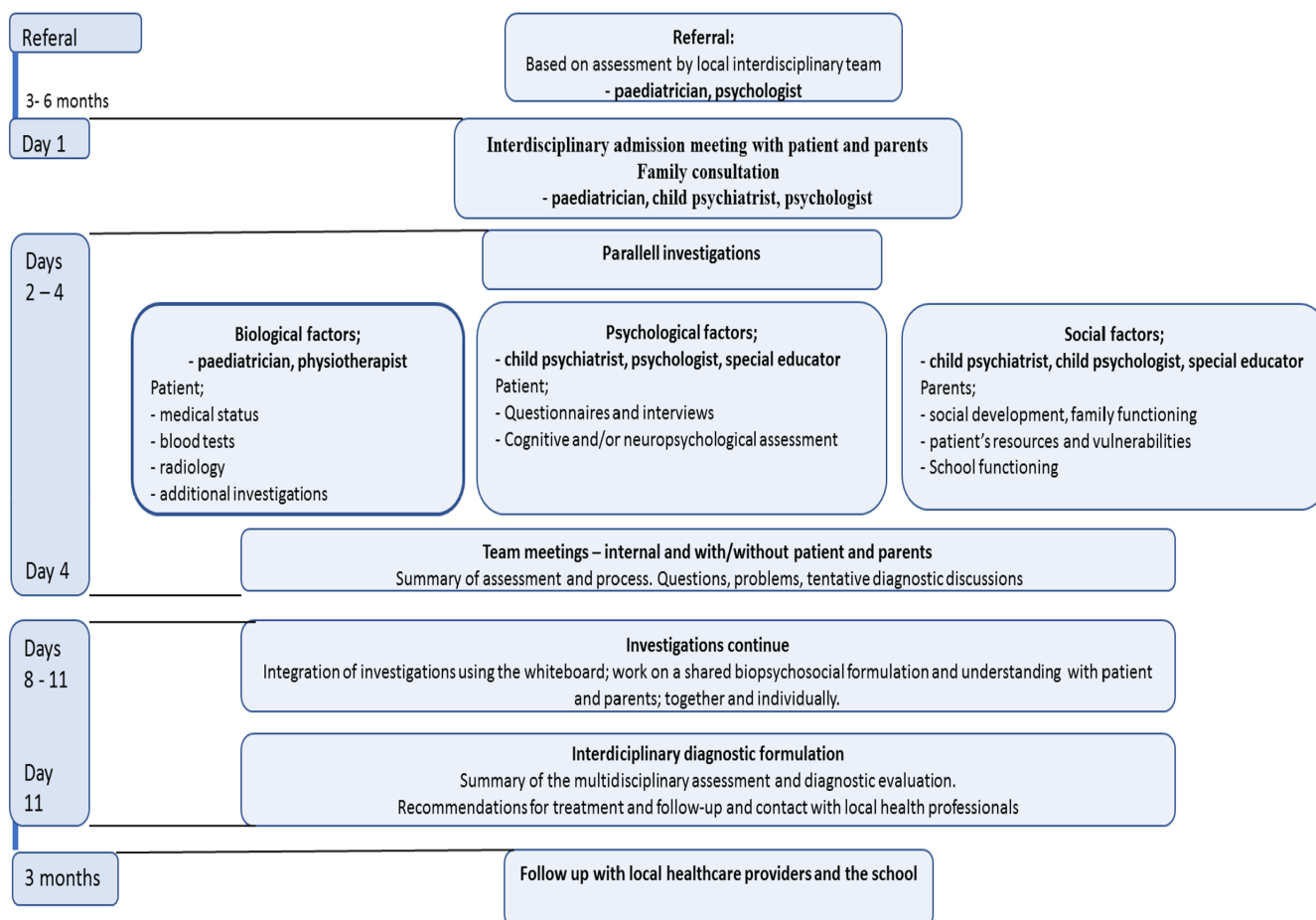


FIGURE 2 Flow chart

importance of sufficient investigation of these, both initially and during the course of the interdisciplinary examination. Gradually, attention can shift from the physical to the psychosocial aspects, and the connection between them, at the pace set by the child and the family.

Parents are encouraged to write a 'developmental history' of their child in which they describe the development in their own words, without any formal requirements. This provides a mutual starting point from which one can further explore the child's and the family's interests and values. Furthermore, it can highlight the family's ways of understanding and coping with physical symptoms or other difficulties. The childhood history acknowledges the family's 'lived experience' of the child.²⁵ It constitutes the 'phenomenon' that is the basis for further assessment of the various aspects of the patient's and the family's situation. The healthcare professionals' task is to immerse themselves in these descriptions, and then, to interpret them by applying their professional expertise to a process that alternates between empathy and interpretation, between phenomenology and hermeneutics.^{26–28} In accordance with Engel's aim for the BPS model, this alternation may serve to expand the patient's understanding in the process where the subjective experience and the patient's own words and concepts meet professional terms and interpretations, creating a new, shared understanding.

Patients and relatives receive education of the physiological mechanisms that mediate between stress system and symptoms, in line with the literature.^{6,29} When these mechanisms are illustrated on a whiteboard or in a drawing, the patient may gain new perspectives on his or her symptoms and his or her history. Symptoms such as pain and paralysis vary with the circumstances, both in terms of character and strength, leaving room for family, friends and school to doubt if the symptoms are 'real'. In many cases, this is the first task that therapists need to communicate: 'We believe in you' and 'we know that the symptoms are not something you're making up'. This may enable the family to let go of feelings of shame and guilt and establish trust in a new therapeutic alliance/relationship. Underlining the adaptive functioning of such reactions adds to the understanding of SSD. This may be of great significance, when the patient is to inform family and friends about the symptoms and why they started in the first place.

Patients have expressed that the whiteboard offers a possibility for them to relieve and normalise their own reactions, maybe through the externalisation of the issues discussed.

2.3 | The whiteboard

The complexity of aetiology, diagnostics and treatment creates a need for simplification and an overview without important factors being omitted or lost from the overall picture. The whiteboard is structured with three columns for biology, psychology and social aspects, respectively, and three rows along a timeline, for predisposing (vulnerabilities), triggering and reinforcing factors (Figure 3). We therefore use a large whiteboard and markers, to note important aspects of the story and of the current situation. This ensures flexibility during the assessment and stimulates collaboration between the psychiatrist/psychologist and the family.

Upon admission, the patient's resources are noted at the top of the board and communicated as the basis for treatment and rehabilitation, as well as for her or his subsequent life. Clinical experience indicates that this focus on positive qualities of the child or adolescent implies an unexpected shift for the family, from a focus on symptoms and symptom severity to resources and positive qualities—in line with recent work on the importance of changing the culture of care for these patients.⁶ The final overview is the result of the individual and family consultations, previous and new evaluations, reflecting the shared understanding of the symptoms. Stressors, be it singular or accumulated incidents, are noted in the history on a par with concurrent emotional, physical and behavioural reactions or phenomena.

Lines are drawn between phenomena that affect each other, in one direction, or bidirectional, if they reinforce each other as part of a vicious circle.

The whiteboard becomes a concrete manifestation of the assessment. As a visual overview of predisposing, triggering and reinforcing factors, with words and concepts that make sense for both patients and healthcare professionals, the whiteboard offers support for joint attention, holding on to important factors, aiding communication and a shared understanding. It helps to clarify

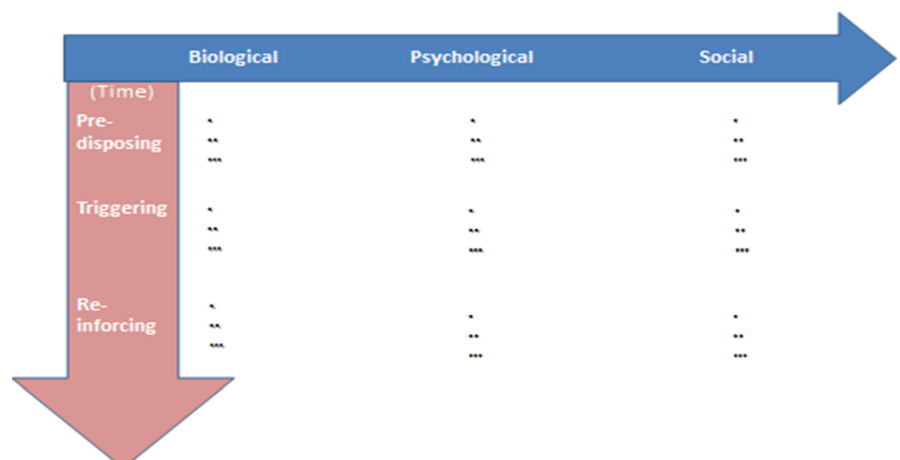


FIGURE 3 Whiteboard; clean

conditions that are assumed to have had an impact on the child/adolescent, conditions that may have been trivialised or neglected by the surroundings, or by the child. This neglect often constitutes an important part of SSD. All of these factors aim to provide a shared basis for assessment of various factors and reasoning—for the patient and the healthcare professionals. Moreover, the links between psychosocial stressors and physical symptoms become more evident and accessible. The whiteboard thus becomes a tool for patient and parents to be involved in the process of integrating a new understanding through their own activity.

Finally, the whiteboard serves as a tool for conveying the evaluation to local health care providers.

2.4 | Predisposing factors

Several studies suggest that the combination of child, parental and contextual factors are found to play a fundamental role in the course of SSD.⁵ In the clinical workup of predisposing factors, we start with the biological and physiological factors pertaining to the specific child or adolescent, for example 'premature birth', 'surgery', 'injury', 'persistent pain' or 'repeated medical investigations'. Social factors may comprise 'serious illness in close family', 'parents' divorce', 'bullied at school' or 'struggling to perform in school', factors derived from the developmental history, questionnaires and interviews. Based on the factors that appear, we investigate psychological factors and try to assess the reactions of the child, for example 'scared/anxious', 'sad' or 'frustrated'. As it is the combination and the timing of the different stressors that—added together—makes a certain child or adolescent more vulnerable to developing SSD, these factors serve as important measures. We convey that children may react differently to the same type of stress. A given stressor has a smaller negative impact when there is low vulnerability for the stressor in question. However, accumulation of repeated stressors constitutes a risk factor for the individual, as it may increase the impact of stressors, including the risk of developing SSD later in life.^{13,14,17}

'Irresolvable dilemmas' may be a potent predisposing factor. Prolonged trauma exposure early in life will often be expressed as bodily symptoms. Such trauma may include adverse events such as various forms of abuse, bullying or parental neglect and/or conflict. The consequence is a splitting of this 'complex', with the risk of developing functional somatic symptoms.

2.5 | Sensory and emotional vulnerability

Hypersensitivity to sensory and tactile stimulation in infancy has been suggested as a predictor of recurrent somatic and impairing symptoms in childhood.¹⁷ From our clinical experience, parents often report that their child showed an increased sensitivity to sensory stimulation, such as noise or smell, from an early age. Furthermore, many parents describe an emotional vulnerability in social contexts, in that the child would often show emotional distress and concern

if other people were hurt or distressed. Research suggests a link between stress sensitivity in children and development of somatic symptoms.¹⁷ Henningsen and colleagues (2018) describe how the brain is an active predictor of how stimuli are perceived, and that unconscious inferential processes about interoceptive sensations are central to the individual's experienced bodily symptoms.³⁰ Our clinical experience shows that these traits are rarely, if ever, mentioned by parents, unless they are specifically asked for. These traits, often mentioned as strong qualities, could be the same features that predispose the child for experiencing general stress more strongly, affecting his or her well-being and ability to learn. Thus, these features will add to the physical, cognitive and psychosocial stress on the child.

An inability or difficulty to describe emotions is a phenomenon often linked to SSD,³¹ increasing the likelihood of sustained, vicious circles of higher emotional and physical stress, impacting the patient's social and cognitive functioning.

2.6 | Triggering factors

When and how the symptoms began is a specific point of reference for patients and therapists. Often, a mild infection or physical injury is stated as the triggering factor. When a mild-to-moderate stressor marks the commencement of severe functional impairment, this is related to the effect of cumulative stress, as various stressors accumulate over time and eventually manifest themselves as symptoms. Some suffer a rapid loss of stamina without this being linked to a particular event, while others develop symptoms slowly, with more and more absence from school and gradual functional decline.

2.7 | Reinforcing factors

Reinforcing factors comprise various reactions to the symptoms; from the surroundings and healthcare professionals, but also from the patients themselves. These factors may relate to symptoms that were present at the starting point of the illness (a triggering factor), and they can be factors related to behaviours and reactions to the illness.⁵ Parents and teachers may encourage the patient to make a greater effort to keep up with their peers, and the patients may also try to compensate for impaired performance by pushing beyond their physical limits over time.

The alternating nature of the symptoms often creates doubt and mistrust, at home, in school and in the immediate environment, as to whether the patient is 'faking' or 'manipulating'. Such mistrust can trigger or amplify conflicts between the child and the parents/caregivers, and between parents and the school. Since this also poses a serious threat to the patient's self-image, it is important that it is addressed from the beginning of the assessment.

The child or adolescent typically lacks the normal structure and rhythm of his or her everyday life, such as regular meals and a normal sleep and wake-rhythm. He or she has often adopted a plan for

daily activities, where efforts are determined on a day-to-day basis, depending on how he or she is feeling that particular day. This form of self-regulation often results in varying levels of school attendance and participation in social activities, and a gradual reduction in overall capacity. In addition, the patient and the family become increasingly uncertain regarding the chances of getting better and what it takes.

The alternative is a structured time schedule based on the efforts available on 'a bad day' or 'a bad week'. Such a plan will ensure predictability and, through regular evaluation, provide an opportunity to assess the measures over a longer period of time. This kind of structure will often pose a challenge to social and psychological patterns and reactions in the family, calling for patience and trust towards treatment and follow-up plans.

Some patients and/or relatives have a need to adhere to a one-sided biomedical perspective on evaluation and treatment. For others, the BPS model and a holistic perspective on biological symptoms is perceived as an unwarranted implicit suggestion of psychiatric disorder or social dysfunction within the family. In such cases, it is challenging to arrive at a shared understanding and measures that can help the patient. Diverging views within the family on symptoms and the meaning of symptoms may represent a conflict area in itself—and may influence treatment and potentially contribute to perpetuation of symptoms.⁵

Figure 4; adapted from a handwritten white board (100x130 cm, easy to carry in different settings), developed and used during investigations, shows typical connections between relevant factors. The whiteboards are also used for follow-ups with local authorities, and patient/parents often take a photograph (Figure 4).

3 | RESULTS

3.1 | BPS as a tool for shared understanding and treatment

The aim of the assessment is an understanding of the symptoms shared by patient and parents on the one hand, and healthcare professionals on the other. This entails that the professional recommendations concerning treatment and follow-up are welcomed by the patient and family. The wording and phrasing of the diagnostic formulation should as much as possible be true to the patient's own descriptions, underlining the importance of the patient's own understanding. The recommended interventions also outline the central challenges for the family in the time to come.

If the patient has an underlying medical illness, optimal treatment of this must be ensured. Suggestions for treatment are individualised and directed at the perpetuating factors and psychological and behavioural patterns that patients and parents need help to change.

The team presents recommended outlines of treatment, based on identified medical conditions. Chronic pain may need both medication and physiotherapy, and medical interventions may be part of treatment for a sleep disorder. Targeting school functioning is

essential, including a tailored, concrete plan for school attendance and follow-up.

4 | DISCUSSION

Engel describes the BPS model as a physical, psychological and social expression of general systems theory. Engel's aim for the BPS model was for the doctor to relate to the patient as an individual, as part of a greater system consisting of interconnected biological, psychological and social factors. This approach holds great promise for children and adolescents with SSD, as it underlines the importance of patient-centred, structured, interdisciplinary work.

The method ensures that the patient and parents are invited to a dialogue, in which the family can engage in exploring the history and current themes of importance. Taking 'lived experience' as a shared starting point in the investigations implies a recognition of the patient and his or her situation. This is important for building trust throughout the investigations. It also serves as a constant reminder for the clinician of the elements needed to keep the right pace, through the difficult process of developing a shared understanding. Thus, new insights and a new comprehension for the interplay of factors contributing to the symptoms can emerge gradually, as a basis for treatment and rehabilitation. The whiteboard supports this process by offering a visual expression of the BPS model and the BPS understanding. The patient is offered an opportunity for a new perspective on the symptoms, and an experience of a clear overview, predictability and control of his or her situation. Furthermore, this may install a new sense of confidence, in the midst of all the difficult aspects underlying the symptoms.

There are several barriers to the assessment and treatment of SSD in children and adolescents, such as variations in diagnostic labelling.⁵ Physical factors and symptoms are measurable to a greater extent, than psychosocial factors, and can be described and delineated more clearly. Assessing a complex condition such as SSD offsets special requirements for the evaluation of the psychosocial factors and their relationship to the physical symptoms. The identification, interpretation and characterisation of these factors are the result of the collaborative efforts made by the patient/parents and healthcare professionals. Furthermore, the assumed interconnections between psychosocial and physical factors must be consistent with current research. The significance of individual factors must then be evaluated, considering the overall causal factors and symptoms.

Large studies have shown how psychosocial stress and trauma can predispose for physical and mental illness, as a consequence of defined individual incidents, but also as the sum of cumulative incidents or prolonged ongoing stress.^{13,14} Symptoms evolve, depending on the strength of stressors and on psychological and physical resilience and vulnerability. Consequently, patients experience loss of predictability and control. Therefore, a main task for clinicians is to implement interventions targeted at restoring the sense of predictability and control.

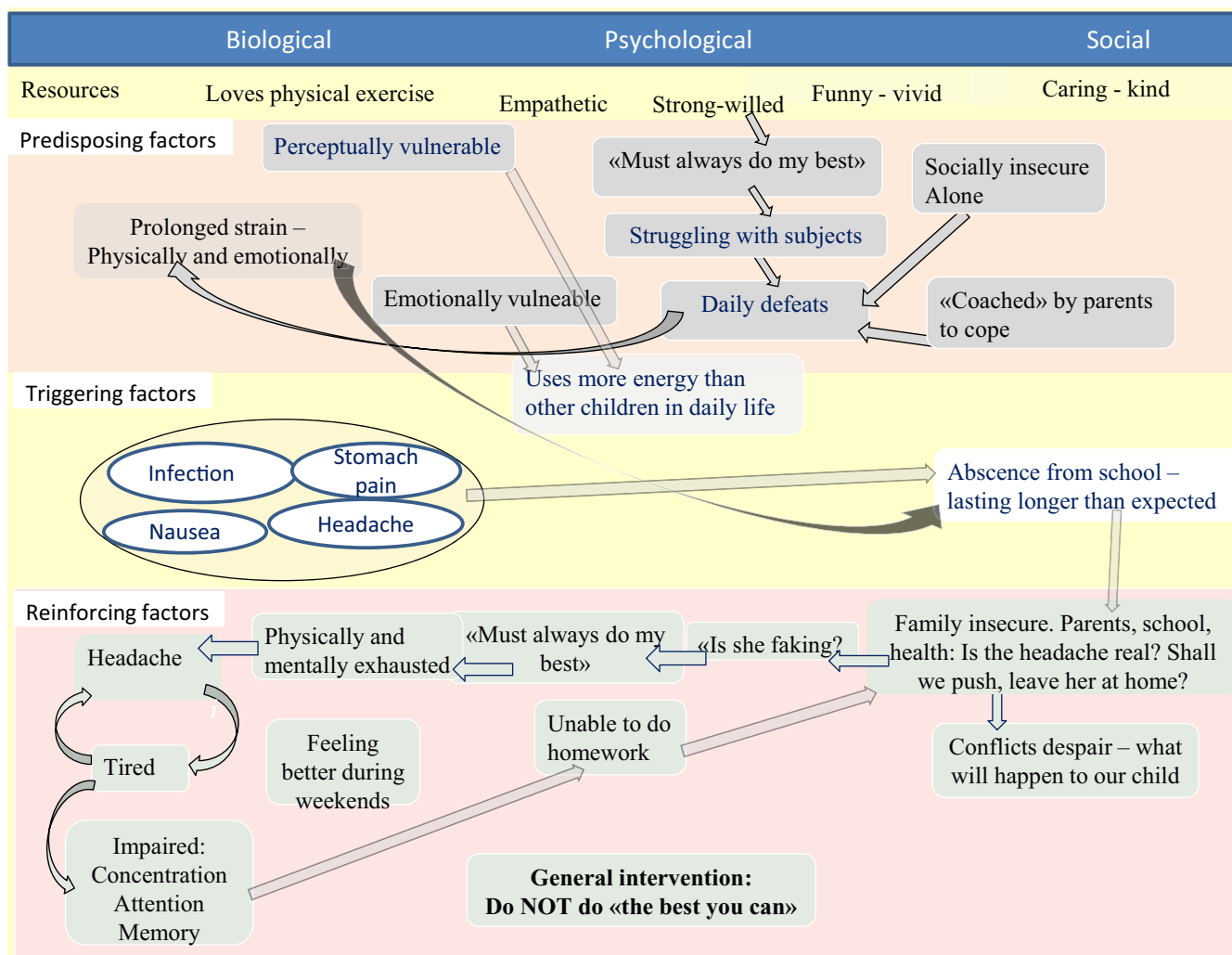


FIGURE 4 Whiteboard; example of development of a whiteboard: The words denote descriptions, interpretations and clinical phenomena. The arrows denote assumed relations between phenomena, developed during the assessment. Corresponding to the experience of the patient, a ‘walk’ through the board starts at Triggering factors, followed by Reinforcing factors, to end on top with biological, psychological and social Predisposing factors. This board is made for a 10-year-old girl, with trouble making relations with class mates, with increasing trouble doing homework and increasing headache as marker for daily function. Caring and worried parents. Perceptual and emotional vulnerability, and a strong will, that worked to increase daily dilemmas and stress

The structure presented here builds on diagnostics and differential diagnostics related to the diagnostic systems.^{22,23} The BPS method has a broader scope, in aiming to identify the so-called ‘vulnerability factors’; factors that do not qualify for any diagnosis individually, but accumulated they have an impact on overall health. This ‘failure’ to reach diagnostic threshold leaves a significant number of patients with SSD without the sufficient assessment and treatment in the mental health services, even those with a profound functional decline. Thus, a dualistic healthcare system that is neither professionally nor organisationally equipped to capture, assess, understand and treat these conditions, may contribute to exacerbating the symptoms. In line with previous findings and a BPS understanding, parental and contextual factors play a fundamental part in the course of SSD, and must be part of the treatment.⁵

The BPS model has been criticised for not meeting the requirements of a scientific model.³² Furthermore, it is claimed that the BPS model cannot be a model for clinical practice, as it fails to show the clinician what to do in each individual case.^{32,33} It is also criticised for the lack of an unambiguous relationship between stressors and symptoms.³⁴ However, a recent review offers valuable clinical recommendations as to how the BPS model serves as a guide for assessing and treating SSD.⁵ Furthermore, ‘Models as Mediators’ justifies that the BPS model can be deemed to be partly free of a specific theory, as an independent ‘entity’ that can give rise to both theory and other models.³⁵ There is a need, however, for more clinical research on the BPS method as a basis for investigating, understanding and helping patients with SSD.

5 | CONCLUSION

The article discusses the BPS model as the basis of a structured clinical method for the investigation and assessment of SSD in children and adolescents. The aim of the BPS method is to reach a new, shared understanding of the symptoms, and which clinical interventions are needed for symptom reduction in a specific case.

A clinical assessment based on a BPS method means every healthcare professional in the interdisciplinary team has an equal share in the examination and evaluation of the symptoms, and the suggested treatment interventions. We believe the structure of the BPS method can be adapted on many levels, even the less resource-intensive. Kozłowska and colleagues (2021) have concrete suggestions as to how this can be done.⁶

A holistic BPS understanding aids a patient-centred approach, including and balancing biological, psychological and social factors as contributors to a given symptom condition. For the clinician, the assessment is a joint collaboration with the patient and the family, as well as the rest of the interdisciplinary team reaching a new understanding.

When this new, holistic understanding has been shared and integrated by the family and the local team, there is foundation for improvement.

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CONFLICT OF INTEREST

We declare no conflicts of interest.

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