



A Systemic Approach for the Management of the Program "Development of a National System for the Prevention and Management of Overweight and Obesity in Childhood and Adolescence in Greece"



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Background: Obesity in childhood and adolescence represents a major health problem of our century and accounts for a significant increase in morbidity and mortality in adulthood. Prevention is the main aim of the Program "Development of a National System for the Prevention and Management of Overweight and Obesity in Childhood and Adolescence in Greece" (MIS 370545), which is sponsored by the National Strategic Reference Framework (NSRF) 2007–2013. The program has the endorsement of the Ministry of Health and the Special Account for Research Grants of the National and Kapodistrian University of Athens. It is implemented by the Division of Endocrinology, Metabolism and Diabetes, First Department of Pediatrics, "Aghia Sophia" Children's Hospital, which serves as a Center for the Prevention and Management of Obesity in Greece.

Aims & Objectives:

The main aim is to create a viable system for the prevention and management of childhood obesity.

Specific aims include:

- Development of the National Registry for Childhood Obesity in Greece (web service)
- Guidance and Training of Pediatricians and General Practitioners as of how to manage and deal with an overweight or obese child/adolescent.
- Awareness of doctors, other healthcare professionals, as well as parents and families regarding nutrition, physical activity and the psychological consequences of childhood obesity
- Coordination of Bodies and Entities that are engaged with children's health

Our objectives in order to identify the most efficient actions to generate consistent, optimum results are to:

- Understand where the complexity originates, and which are the major sources that interact together to create the environment in which we will operate
- Ensure that a strategy is put in place to manage each element of complexity identified by the analysis

Methods:

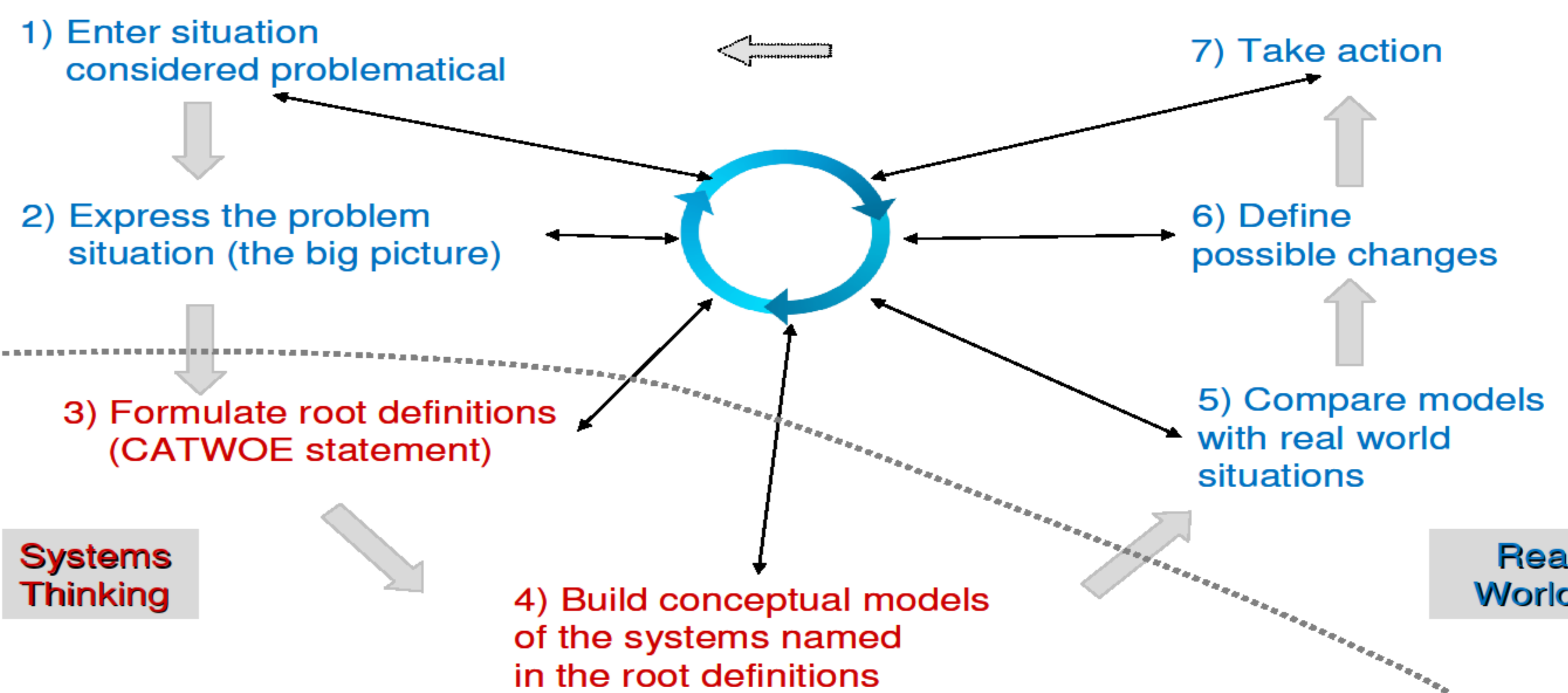
The **Soft Systems Methodology (SSM)** is a systemic approach for dealing with real-world complex or problematic situations.

SSM is used to manage the complexity raised by the interaction of the Center, the primary stakeholders and the external environment consisting of the hosting hospital, other hospitals, pediatricians, partners, collaborating organizations, societies and others, which all together form an integrated whole.

Applying SSM's CATWOE statement (Clients, Actors, Transformation, Worldview, Owner, Environmental Constrains) and modelling the problem at different abstraction levels is also a way to understand the whole system.

Results and Conclusions: The methodology was instrumental in augmenting our understanding of the systemic interaction of the system's elements and the underlying structures associated with the Center's internal and external operating environment. Furthermore, the methodology illustrated the communication arrangements, which contribute to delays in system flows that impact the operating effectiveness of the procedures associated with the management of overweight and/or obese children.

Soft Systems Methodology



CATWOE statement

C	Customers	Who are the beneficiaries of the highest level business process and how does the issue affect them?	<ul style="list-style-type: none"> • Pediatricians <ul style="list-style-type: none"> ➢ Guidance in terms of how to manage overweight and/or obese children and adolescents • Children and adolescents <ul style="list-style-type: none"> ➢ Quality of life • The Ministry of Health <ul style="list-style-type: none"> ➢ Decrease of the expenses spent each year for the admission of patients due to the complications of obesity
A	Actors	Who is involved in the situation, who will be involved in implementing solutions?	<ul style="list-style-type: none"> • Scientific Supervisor of the Program, Prof. Evangelia Charmandari • Project Manager, Penio Kassari • "Outpatient Clinic for the Prevention and Management of Increased Body Weight" at "Aghia Sophia" Children's Hospital • The Ministry of Health
T	Transformation	What is the transformation that lies at the heart of the system?	<ul style="list-style-type: none"> • Development of the National Registry for Childhood Obesity in Greece (web service)
W	World View	What is the big picture and what are the wider impacts of the issue?	<ul style="list-style-type: none"> • Quality of life • Decrease of the expenses (National Health Budget)
O	Owner	Who owns the process or situation?	<ul style="list-style-type: none"> • Scientific Supervisor of the Program, Prof. Evangelia Charmandari • Scientific Team Members, Prof. George Chrousos, Assist. Prof. Yiannis Manios, Prof. Andreas Margioris and Prof. Christos Lionis • First Department of Pediatrics, University of Athens, Division of Endocrinology, Metabolism & Diabetes, "Aghia Sophia" Children's Hospital, Athens, Greece
E	Environmental constraints	What are the constraints and limitations that will impact the solution and its success?	<ul style="list-style-type: none"> • Financial Crisis • Political instability • Low prevalence of breast feeding during the first years of life



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