



# Theory Analysis: Dorothy E. Johnson (Behavioral Theory) According to the Chinn and Kramer Model

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**Abstract. Background:** the behavioral system model is a nursing conceptual model, a behavioral system of patterned, repetitive and purposeful behavior patterns— Dorothy E. Johnson, to provide a theoretical framework for nurses to prevent bullying.

**Aim:** analysis guidelines were used to analyze Dorothy E. Johnson's theory to model behavioral systems. **Methods:** Chinn and Kramer's theory analysis guidelines were used to analysed Dorothy E. Johnson's theory to model behavioral systems.

**Results:** six main concepts and sub-concepts were identified. The behavioral model system theory, which is nursing care, is carried out to help individuals facilitate effective and efficient behavior to prevent disease.

**Conclusion:** this theory is important for guiding nursing practice, research, and education. However, some drawbacks are complex because there are several possible relationships between one another in behavioral systems, subsystems, and the environment.

**Keywords:** Theory Analysis · Johnson Behavior Theory · Chinn and Kramer

## 1 Introduction

One of the acts of violence that is still problematic in the world of school children's education is school bullying. Bullying is aggressive and aggressive behavior by one or more people towards someone who is unable to defend himself [1]. Bullying itself is defined as a form of aggressive behavior in which a child or group repeatedly uses their stronger position to intentionally hurt peers, often in a school context [2].

Bullying in various schools includes three categories, the first being the physical category according to by 30% [3]. These bullies use physical violence such as children hitting their friends, kicking, pulling hair, pushing, spitting, pulling clothes, disturbing the victim and telling the victim to do something that is not their authority. Other actions that use physical violence [4]. In verbal bullying, such as cursing, saying or interpreting dirty words to the victim, making fun of the victim's friends, inappropriate words of the

victim, making fun of family background and family finances [5]. The third category is cyberbullying by 23% of these actions by spreading rumours to victims, children slandering victims with actions that are not their actions [6].

Nurses are factors that have an important role in changing patient behavior so that there is a state of balance (equilibrium) in the patient. One method that can be used is the Behavioral System Model of nursing care from Dorothy E. Johnson. The Behavioral System Model theory views individuals as behavioral systems that always want to achieve balance and stability, both in the internal or external environment, also have a desire to regulate and adjust from the effects they cause.

Interventions used to change patient behavior in the Behavioral System Model are external regulation, for example by limiting behavior and inhibiting ineffective behavioral responses, changing structural elements with the aim of motivating patients by providing health education and counselling and meeting subsystem needs by nurturing, protect and stimulate.

Dorothy Theory Johnson focuses on how clients adapt to their illness and how actual or potential stress can affect adaptability. The goal of nursing in this theory is to reduce stress so that the client can move more easily through the healing period.

Dorothy E. Johnson revealed that the nursing paradigm views humans as creatures that have two basic aspects, namely biological aspects and behavioral aspects. The main focus of nursing is to maintain the balance of the human behavioral system.

Theory is a creative and rigorous arrangement of ideas that projects a tentative, directed and systematic view of phenomena. This theory is based on the assumptions, values and judgments of theorists [7]. According to Watson, theory is a grouping of thought, knowledge, ideas, and experiences that try to explain the phenomenon [8].

Because it is a broad theory that involves abstract aspects, it may be difficult to apply in practice so its analysis is needed to support research and nursing care delivery. Based on the description above, it aims to analysed the theory of Dorothy E. Johnson according to the description of the Chinn and Kramer model.

## **2 Method**

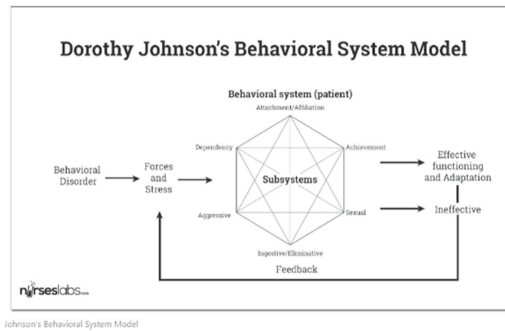
This analysis is based on Chinn and Kramer's theory evaluation model consisting of a description and critical reflection of the theory by using a theory description model that involves 5 components: clarity, simplicity, generalizability, importance, and accessibility [7].

## **3 Results**

### **3.1 Clarity**

Nursing care that advocates efficient and effective development of behavioral functions in patients to prevent disease [7]. Vocabulary.

Patients were identified as a behavioral system consisting of seven behavioral subsystems: affiliative, dependent, ingestive, eliminative, sexual, aggressive, and achievement.



**Fig. 1.** Dorothy W. Johnson's concepts and sub-concepts

The three functional requirements for each subsystem include protection from harmful influences, provisions for maintaining the environment, and stimulation for growth. An imbalance in any of the behavioral subsystems causes an imbalance. It is the role of nursing to assist the client to return to a state of balance.

Johnson developed his behavioral system to treat it from a philosophical perspective “supported by a rich, sound and rapidly expanding body of empirical and theoretical knowledge”. From her initial beliefs, which focused on the sick individual, Johnson developed one of many broader definitions of nursing [9].

### 3.2 Simplicity

Chinn and Kramer define a concept as an idea that is structured and related in theory. The human concept is defined as a behavioral system that seeks to make continuous adjustments to achieve, maintain, or regain balance, namely adaptation [7]. There are 4 main concepts in Johnson's behavioral systems theory and 8 sub concepts [9]: Client: Behavioral system of people who are threatened or potentially threatened by disease (disorder) and/or hospitalized.

Environment: There are no specific places identified; Health: A system of people's behavior that functions efficiently and effectively that maintains balance or stability by adapting or adjusting to external forces; Nursing: Regulating external forces to stabilize the client's behavioral system and restore, maintain, or achieve balance [9].

It has 8 sub concepts as follows: Affiliate attachments or subsystems: Serve security needs through social inclusion or intimacy; Subsystem dependencies: Behavior designed to get attention, recognition, and physical favor; Ingestive subsystem: Meets the need to supply biological needs for food and fluids; Eliminative subsystem: Function to remove waste; Sexual Subsystem: Serves the biological needs of procreation and reproduction; Aggressive Subsystem: Functions in self and social protection and preservation; Subsystem performance: The function to control and control oneself or the environment [9].

### 3.3 Generalizability

As recommended by Chinn and Kramer, the definition in Dorothy E. Johnson's theory will contribute to a better evaluation of the description component. In this case, definitions are presented on the same topic to facilitate discussion of this theory [7]. The behavioral system model is a model of nursing care that advocates efficient and effective development of behavioral functions in patients to prevent disease. Patients were identified as a behavioral system consisting of seven behavioral subsystems: affiliative, dependent, ingestive, eliminative, sexual, aggressive, and achievement. The three functional requirements for each subsystem include protection from harmful influences, provisions for maintaining the environment, and stimulation for growth. An imbalance in any of the behavioral subsystems causes an imbalance. It is the role of nursing to help the client to return to a state of balance [9].

### 3.4 Importance

Relationships show how concepts are related, the various forms that can form relational statements, and how concepts provide structure to behavioral systems theory [7]. This tendency to act implies that despite having only a few alternatives from which to choose a behavioral response, individuals will rank those choices and choose the option that is considered the most desirable [9]. Diagram depicting aspects of the structure in Fig. 1. The structure relates behavior change to concepts and sub-concepts.

### 3.5 Accessibility

Accessibility is accepted basic truths that underlie theoretical reasoning Johnson stated that care does not depend solely on the medical, but care is a partner to other healthcare teams. Care for clients also develops scientific and artistic abilities [7]. This is also the basis for the characteristics of a profession. Dorothy E. Johnson believes that nursing care is done to help individuals facilitate effective and efficient behavior to prevent disease. Humans are whole creatures and consist of 2 systems, namely biological systems and certain behaviors. The environment, including society, is an external system that influences a person's behavior. A person is said to be healthy if he is able to respond adaptively both physically, mentally, emotionally and socially to the internal and external environment in the hope of maintaining his health.[9].

Research linkages in Dorothy's theory e. Johnson, namely with the research title "The Effect of Behavioral System Model Based Nursing Intervention on Adolescent Bullying". With the aim of this research, it was conducted experimentally with a pre-post-test and a control group to determine the effect of behavior-based education on the model system given by the creative drama method on adolescent bullying. With research methods. Research design: this research was conducted in a quasi-experimental study with pre-post-test and control group. With a research sample of 83 respondents in children. With the results of the study the decrease in the average percentage score of the peer bullying scale of students in the study group was higher than the control group. The average of the first pre-educational measurement of the traditional peer

bullying scale score of the study group students was less on the 2nd and 3rd post-educational measurements. The increase in the average percentage of problem-solving inventory scores for adolescents and for the study group was higher than the control group. The mean of the first pre-educational PSIC measurement score and the empathy index for children increased on the 2nd and 3rd post-educational measures. Creative drama education increased empathy and problem-solving skills of intervention group students and decreased the status of bullying and victims of bullying. Drama education is effective in preventing bullying and can be used in prevention programs Creative drama education increased empathy and problem-solving skills of intervention group students and decreased the status of bullying and victims of bullying [10].

Drama education is effective in preventing bullying and can be used in prevention programs Creative drama education increased empathy and problem-solving skills of intervention group students and decreased the status of bullying and victims of bullying. Drama education is effective in preventing bullying and can be used in prevention programs [11].

The first assumption is an explicit assumption [12], including:

- a. Behavior is the sum total of physical, biological, and social factors
- b. A behavior that occurs in an individual gives an assessment at this time which is the result of a collection of consequences over time
- c. Everything is orderly and constant, when there is a disturbance of integrity, the individual will be able to cope and prepare his functions adequately
- d. The individual is a system of behavioral characteristics that are obtained because the process is repeated, regular, predictable.
- e. the direct goal of behavior always leads to a balanced condition
- f. There are different levels of balance and stability in each period/time
- g. Balance is the main thing so that individual functions become effective and efficient
- h. Balance is also related to the development and maintenance of the components of the subsystem or the system as a whole to maintain the adaptability of the environment
- i. Changes in the structure or function of the behavioral subsystem related to dissatisfaction with goal setting, lack of functional needs, or changes in environmental condition.

While the implicit assumptions consist of:

- a. Everyone is able to reduce the components learned
- b. Each individual is like a system that has parts, namely:
- c. Subsystem
- d. All behavior can be observed through data selection

The basic points of Dorothy E. Johnson's behavioral systems model

1. Derived from Nightengale's belief that the goal is to help individuals prevent or recover from illness or injury. Nursing focuses on the basic needs of the person and has a concern for the relationship between the person and the environment. This concerns the sick person and not the disease.

2. It is based on pre-existing knowledge and developed from a number of different disciplines including psychology, sociology and ethnology.
3. Use concepts from other disciplines including social learning, motivation, sensory stimulation, adaptation, tension, and stress.
4. Relies on “systems theory.” A system is made up of interrelated parts that function as a whole.
5. The aim of this model is to maintain and restore balance in the patient by helping him or her reach a more optimal level of function.
6. Johnson used years of behavioral observations to formulate a general theory of humans as behavioral systems. This model focuses on social behavior.
7. Behavior is the sum total of biological, social, cultural, and psychological behavior. This is the goal and goal orientation are the organizing framework for all behavior.
8. Is a conceptual grand theory

## 4 Discussion

The nursing process of the Nursing Behavior System Model begins with the assessment and diagnosis of the patient. Once a diagnosis is made, nurses and other health professionals develop a nursing care intervention plan and implement it. The process ends with an evaluation, which is based on the balance of subsystems [7]. The Johnson Behavioral System Model is best applied in the evaluation phase, during which time the nurse can determine whether or not there is balance in the patient subsystem. If a nurse helps a patient maintain a balance of behavioral systems through illness in a biological system, they have succeeded in that role [9].

### 4.1 Advantages

Dorothy Johnson’s theories guide nursing practice, education, and research, generating new ideas about nursing; and distinguishes nursing from other health professions. It has been used in inpatient, outpatient, and community settings as well as in nursing administration. It has always been useful for nursing education and has been used in educational institutions in different parts of the world. Another advantage of this theory is that Johnson provides a frame of reference for nurses who are concerned with specific client behaviors. It can also be generalized across ages and cultures. This theory also has the potential for continued utility in nursing to achieve valuable nursing goals.

### 4.2 Weakness

This theory is potentially complex because there are several possible interrelationships between behavioral systems, their subsystems, and the environment. Potential relationships have been explored, but more empirical work is needed. Johnson’s work has been used extensively with people who are sick or facing the threat of illness. However, its use with families, groups, and communities is limited. Although the seven subsystems identified by Johnson are said to be open, related, and interrelated, there is a lack of clear definitions for the interrelationships between them, making it difficult to view the entire behavioral system as an entity. Problems involving interrelationships between concepts also make it difficult to follow Johnson’s logic.

## 5 Conclusion

Theories and models play an active role in the planning and implementation of care. Nursing care and this makes it easy for nurses to collect detailed data about patients and approach problems holistically. The behavioral system model is a guide in the process of evaluating patients with a holistic approach, determining and changing behaviors that need to be changed in patients within the framework of seven subsystems, by presenting a systematic perspective to nurses. It makes the points that need to be focused on the patient's recovery more visible. This model evaluates the impact of an intervention by focusing on situational imbalances in a person's behavior and their correction.

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