Pain Symptom Cluster's (SC) Effect on the Psychoneurological SC and Performance in Advanced Breast Cancer

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Outline

- Learning Objectives
- The study Aim
- Background and Definition
- Theoretical framework
- Study Model
- Method/design
- Data analysis
- Study Findings
- Implication

Learning objectives

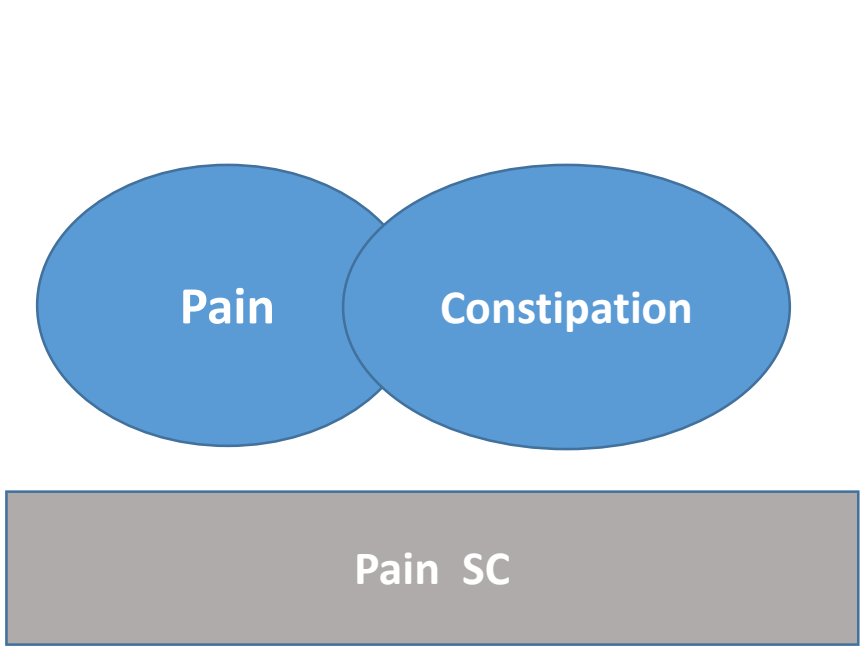
1- The audience will be able to identify the most commonly reported symptoms in breast cancer women.

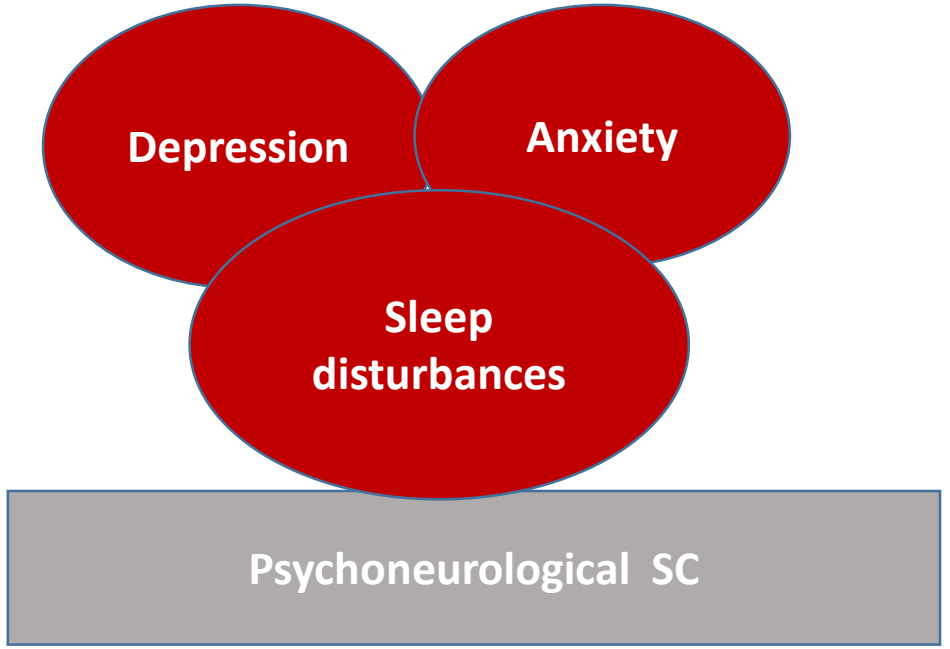
2- The audience will be able to define the term of “Symptom cluster”.

3- The audience will be able to conclude the significance of managing symptom clusters rather than managing individual symptoms.

Study Aim

- This study aimed to examine the effect of the pain SC on one or more symptoms of the psychoneurological SC and performance status in advanced stages of breast cancer in order to confirm the effect of the pain SC–pain &constipation, and psychoneurological SC effects on performance status as stated in prior cancer literature.





Background

- Breast cancer can be a fatal disease and it is associated with multiple symptoms that may affect physical functioning and quality of life if left untreated.
- Pain, fatigue, depression, sleep disturbances, anxiety, nausea, vomiting, constipation, and other symptoms are reported frequently in samples of women with breast cancer.
- Many of these symptoms are highly correlated and reported in groups, called symptom clusters

(Barsevick, 2007; Armstrong, 2003; Kim et al., 2005; Parker et al., 2005).

Background

The prevalence and severity of symptom clusters can be affected by a variety of factors:

- Psychological factors
- Physiological factors.
- Situational factors

Background

Factors Affecting Performance Status:

- Pain
- Psychological distress
- Age
- Baseline performance
- Multiple symptoms
- Co-morbid conditions
- Socioeconomic status

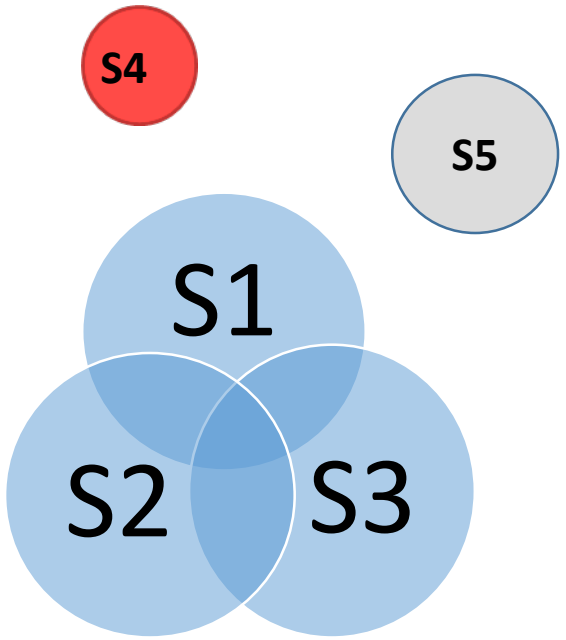
Background

Symptom clusters have different effects on patient outcomes:

- Worsening of the disease itself and its progression.
- Interfering with the patient's physical status, daily life, and social relationships contributing to emotional distress.
- Creating a financial burden on patients and their families.

Chen, et al., 2007; Dodd, et al., 2001; Given, et al., 2001; Suwisith, Hanucharurnkul, Dodd, Vorapongsathorn, Pongthavorakamol, & Asavametha, 2010 ; Gift et al., 2004; Kim et al., 2005; So et al., 2009

Definition of Symptom Cluster



- The presence of two or more co-occurring symptoms
- That are correlated to each other;
- The correlation between symptoms in one cluster should be stronger than their correlation with other symptoms in different clusters.

(Kim et al., 2005)

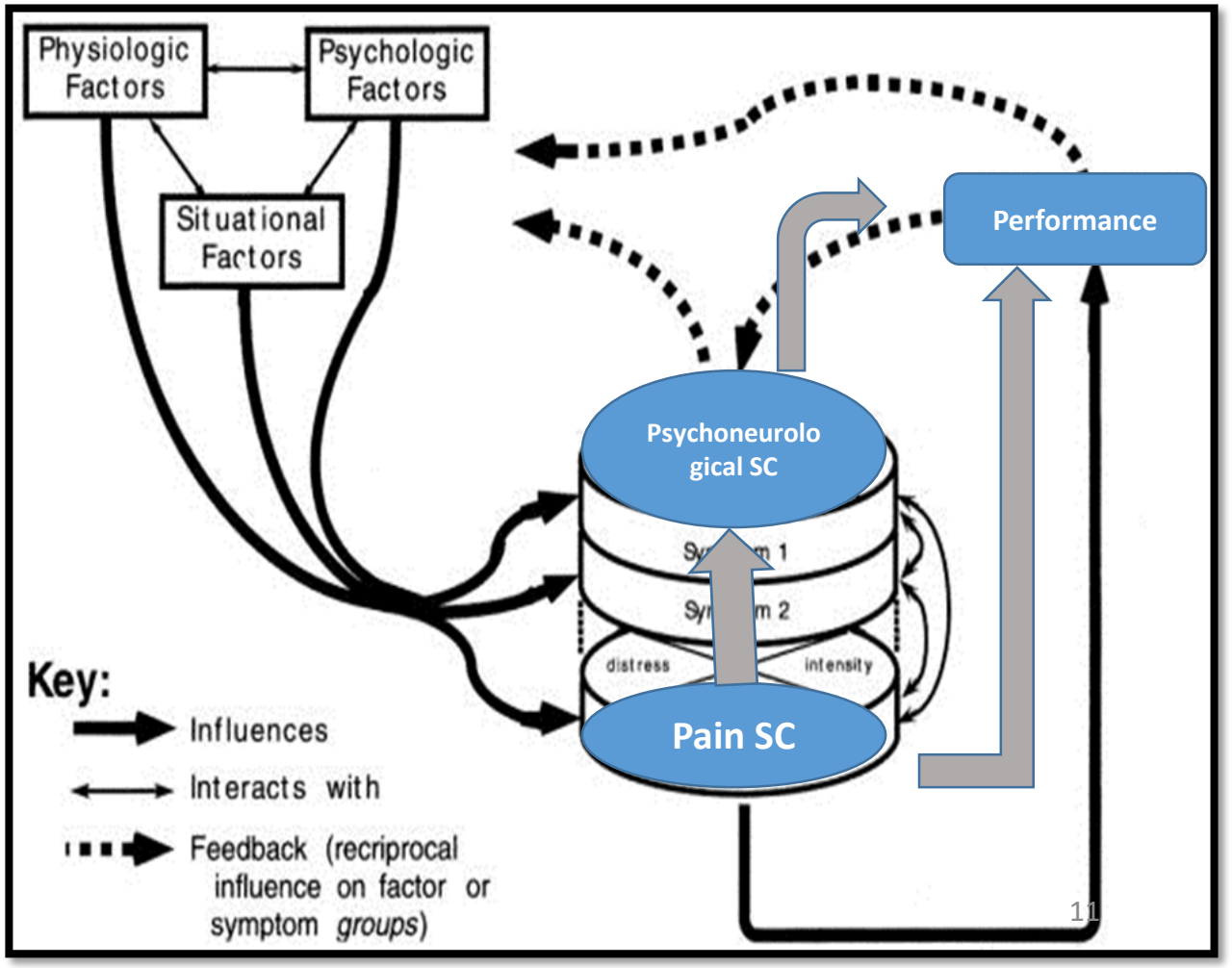
Theoretical Framework

The Theory of Unpleasant Symptoms (TOUS)

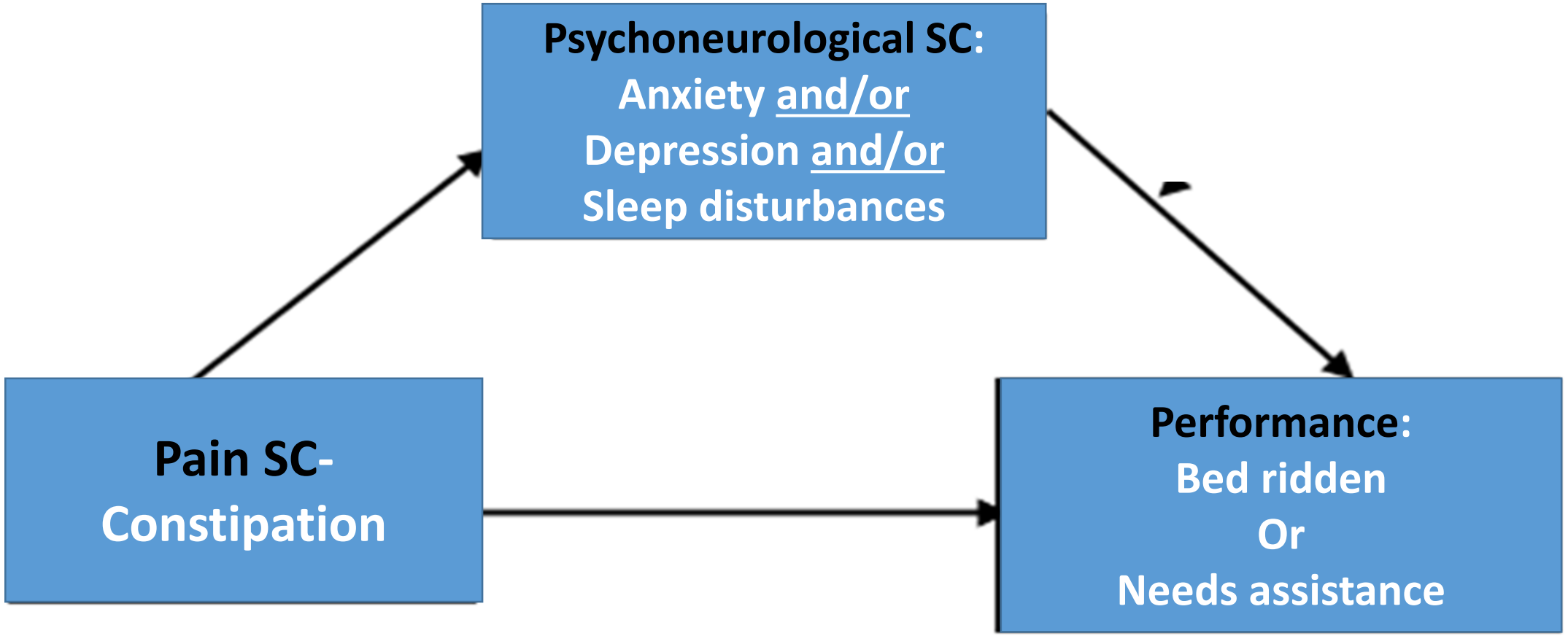
Theory authored by Lenz, Pugh, Milligan, Gift, & Suppe, 1997

How does the theory interface with this study!

Theory Model



Exploratory Study Model



Instrument

Symptom checklist (38 Symptom

Symptom	Absent/ Present	Mi	Mo	S
Depression		Mi		
Pain				
Anxiety				
Constipation				

Performance level (ECOG)

Needs assistance

Bed ridden

Method& Design:

- Secondary analysis of cross-sectional dataset

- Study Sample:
  - 86 were women with advanced breast cancer
  - 30-92 years (m=61.5)
  - Inpatients and outpatients
  - Patients referred to the palliative care unit

Data Analysis

- Logistic regression

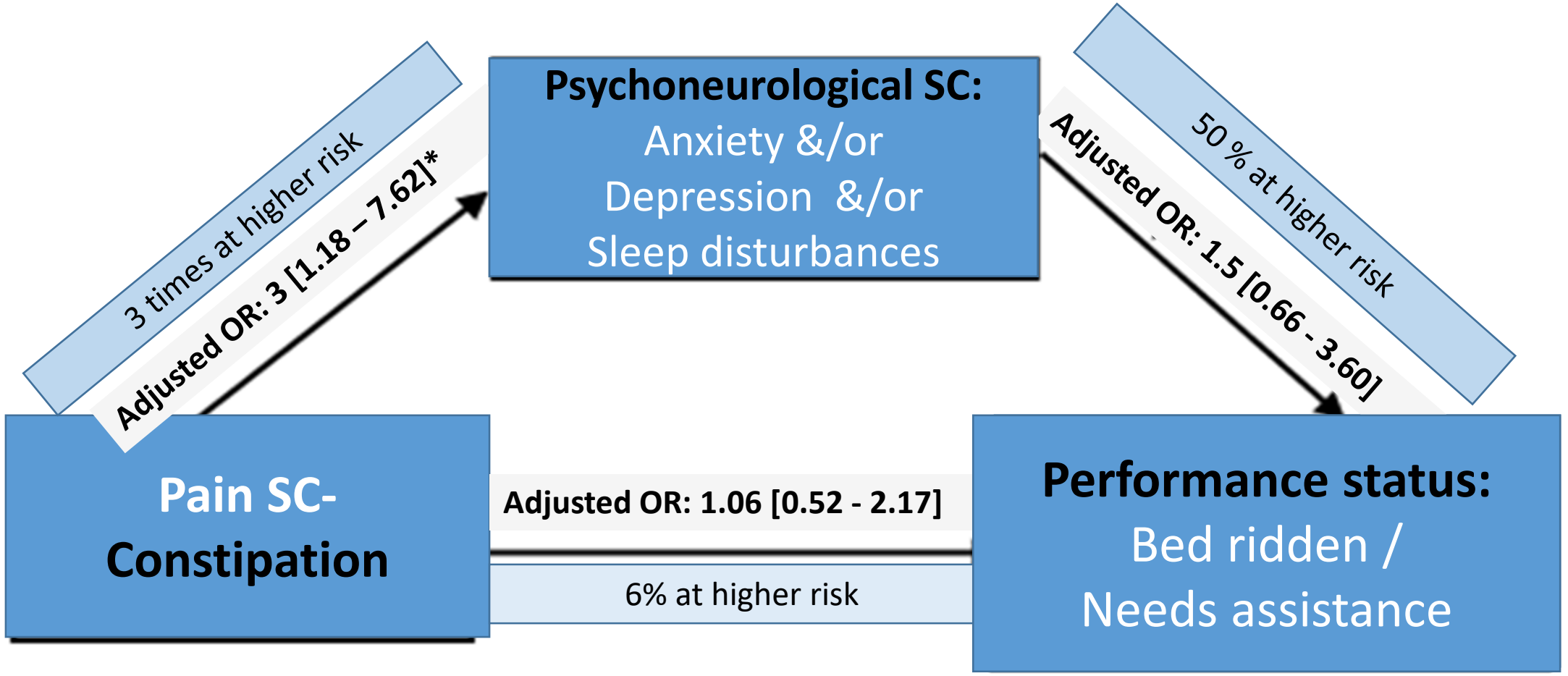
Variables coding:

- **Psychoneurological** SC : have at least Two symptoms
- **Pain SC –Pain:** was “present” if pain was rated as severe
- **Pain SC-Constipation:** “present” if constipation was rated “moderate” or “severe”
- The **performance level** (a new binary variable):
  - “Needs assistance”
  - “Bed ridden”

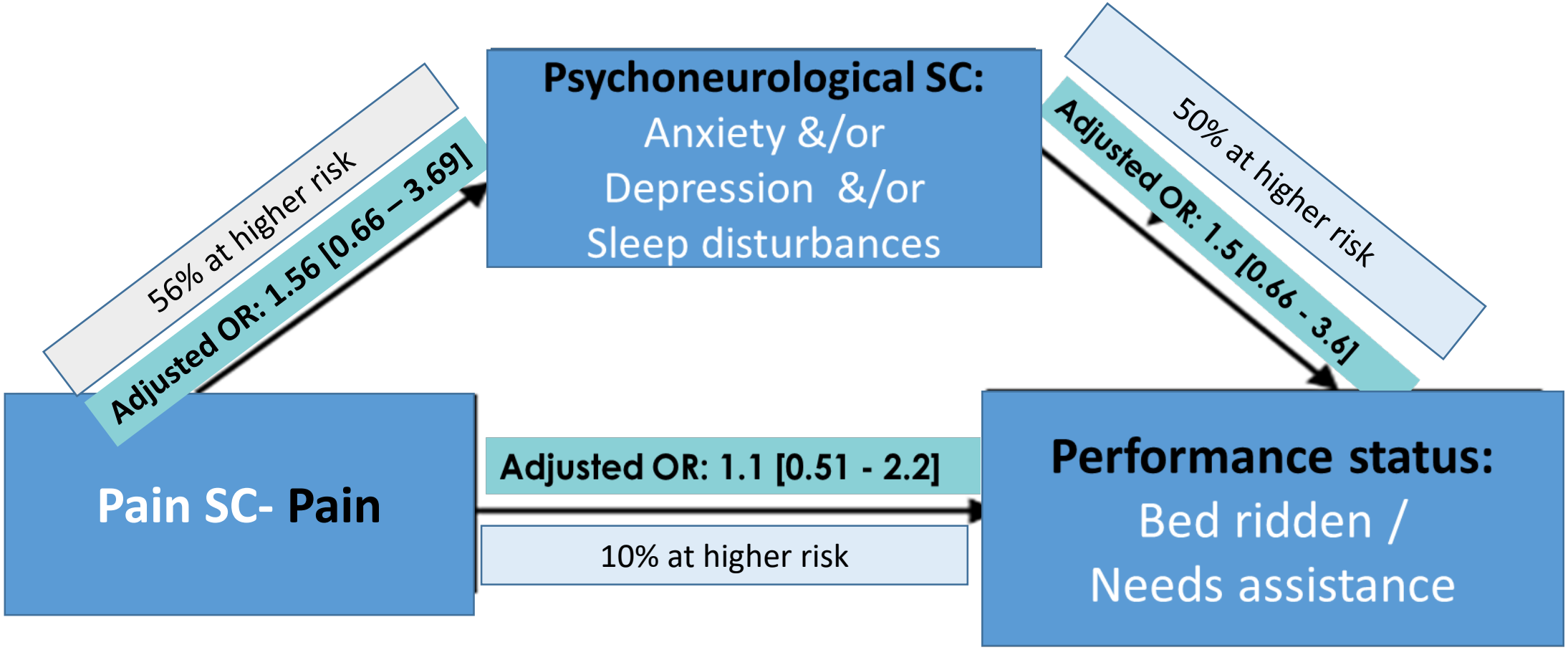
Descriptive Statistics of Study Sample

Category		N or %
Participants (sample)		86
Ages	30-92 (61.5 [SD = 12.7])	
Performance level	Needs assistance	36.1%
	Bed ridden	63.9%

Findings of Pain SC- Constipation



Findings of : Pain SC- Pain



Limitations to the study results

- Small sample size limited the ability to examine the significance of the other associations in the study model.
- Statistical analysis approach limited our ability to determine how many psychoneurological SC symptoms were affected by constipation severity or which psychoneurological SC symptoms were associated with constipation.

Clinical and Nursing Implications

- Early holistic nursing assessment of patients' symptoms can direct Interventions toward managing pain SC.
- Increase clinicians awareness of the need to move beyond assessing patients for single disease symptoms and assess them in a more holistic way.
- Managing one symptom cluster effectively can prevent or control the occurrence of other symptoms or symptom clusters

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