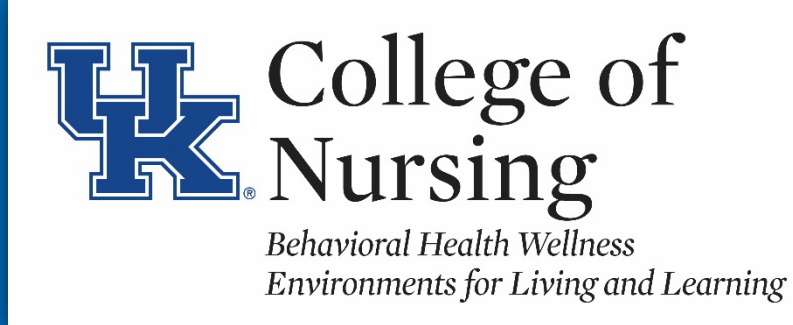


Secondary traumatic stress, burnout, and compassion satisfaction among health care workers at an academic-medical center.



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INTRODUCTION

- Healthcare professionals who provide direct care to patients are at risk for developing Secondary Traumatic Stress (STS), experiencing burnout, and having reduced Compassion Satisfaction (CS)
- STS is characterized by physical and psychosocial symptoms such as the inability to concentrate, anger, disturbing thoughts, sleep disturbances, and avoidance of clients or others (Hinderer et al., 2014; Wagaman, Geiger, Shockley, & Segal, 2015)
- Burnout is defined as an overwhelming state of emotional exhaustion, patient depersonalization and feelings of professional insufficiency (Hinderer et al., 2014; Wagaman et al., 2015).
- Reduced CS may result in Compassion Fatigue, described as a loss of ability to nurture, often a combination of STS and burnout (Hinderer et al., 2014; Kelly et al., 2015)
- Given the significant morbidity, mortality, costs, and impaired care related to STS, burnout, and reduced CS among healthcare professionals, the aims of this study were to:
 - Quantify the rates of STS, burnout, and CS among healthcare workers at an Academic-Medical Center, and
 - Examine demographic, work-related, behavioral, and impact of witnessing or experiencing work-related trauma on STS, burnout and CS

METHODS

- All University of Kentucky Healthcare enterprise employees (i.e. UK Chandler Hospital, Samaritan Hospital, Children's Hospital, and Eastern State Hospital) were invited to participate in a 10-minute electronic survey. Responses were obtained from Nov 2018- Apr 2019.

Measures

Measurement	Description
Demographics	<ul style="list-style-type: none"> Age Gender Marital status Education level
Work Related Factors	<ul style="list-style-type: none"> Shift, length of shift Disciplinary background Work tenure Discipline tenure
Behavioral	<ul style="list-style-type: none"> Tobacco use, secondhand smoke exposure Alcohol use Sleep duration, sleep quality Exercise behavior Mental health problem history Trauma treatment history
Workplace violence	<ul style="list-style-type: none"> Witnessed workplace violence Experienced workplace violence
Secondary Traumatic Stress, Burnout and Compassion Satisfaction	<ul style="list-style-type: none"> 30-item Professional Quality of Life Scale (ProQoL). STS, Burnout and CS are measured each with 10 items on a Likert scale from '1'=Never to '5'= Very often. Summary scores for each scale range from 10 to 50.

Main Analysis

- Descriptive statistics using means with standard deviations and frequencies with percentages were used to describe the sample.
- ANOVAs (with Levene's Tests for Equality of Variance) were used to examine differences in STS, Burnout, and CS scores by discipline and work setting.
- Hierarchical multivariate regression analyses were used by first adding demographic variables, then work-related factors, then behavioral factors, then experience of traumatic events sequentially into each of three models. Adjusted R² with associated F-statistics were used to assess the fit of the final models.

RESULTS

Sample Description

- The majority of participants:
 - Were between 26-35 years of age (41%)
 - Were female (84%)
 - Were married/widowed (58%)
 - Had a college degree or higher (89%)
 - Worked day shifts (72%),
 - Worked shifts ≥ 10 hours or more (64%)
 - Worked in their setting for 2-5 years (44%)

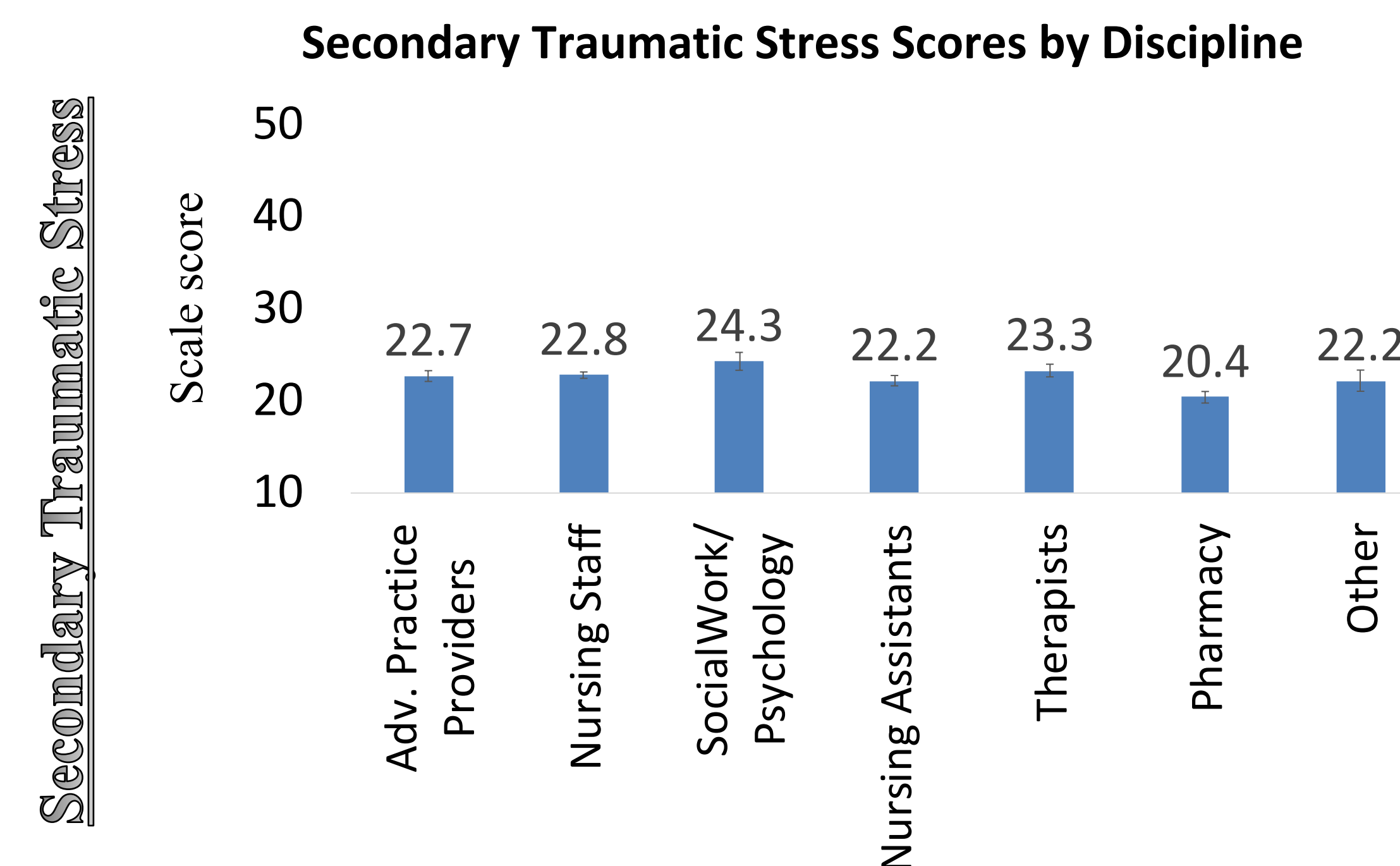
Table 1: Brief Respondent Characteristics (N= 764)

	N	%
<i>Discipline</i>		
Advanced Practice Providers (Physicians, Nurse Practitioners, Physician Assistants)	95	12.4
Nursing staff	329	43.1
Social work/Psychology	47	6.2
Nursing Care Technicians/Nursing Assistants	104	13.6
Therapists (Occupational/Recreational/Physical, Respiratory, Paramedics, Technicians)	82	10.7
Pharmacy	72	9.4
Other (e.g., clerical staff, Administration)	35	4.6
<i>Primary service setting</i>		
Intensive care/Surgical	170	22.3
Emergency	105	13.7
General Medical Wards	209	27.4
Cancer	40	5.2
Psychiatry	136	17.8
Outpatient (e.g., Ambulatory, Family Practice)	48	6.3
Ancillary services (Pharmacy, X-ray, nephrology)	36	4.7
Other (e.g. administration, college of nursing)	20	2.6

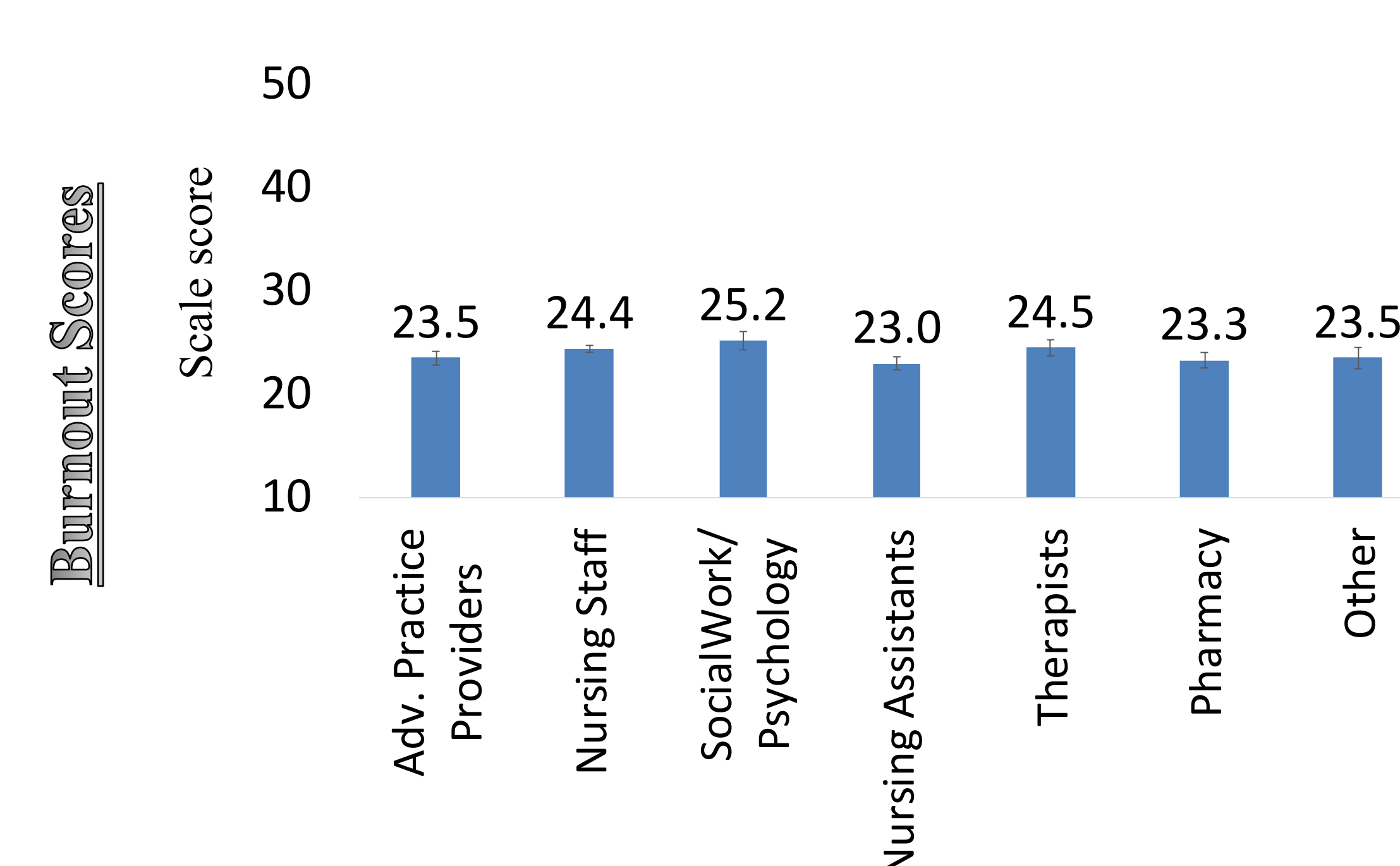
Main Outcomes

- STS:** In the final model (AdjR²= .18, F=4.92, p<.0001) greater STS was associated with:
 - Being a social work/psychologist
 - Greater secondhand smoke exposure
 - Having prior trauma treatment
 - Witnessing/Experiencing workplace violence
 - Younger age
 - Poorer average quality of sleep
 - Lower average days exercised per week
 - Current tobacco use
- Burnout:** In the final model (AdjR²= .26, F=7.01, p<.0001) greater burnout was associated with:
 - Being a social worker/psychologist,
 - Working with the adult population
 - Longer duration of work day
 - Alcohol use in past 7 days
 - Having a behavioral health diagnosis
 - Having experienced workplace violence
 - Being younger than 51 years of age
 - Poor average quality of sleep
- CS:** In the final model (AdjR²= .12, F=3.32, p<.0001), greater CS was associated with:
 - Being female
 - Having a higher average quality of sleep
 - Working with the pediatric populations
 - Not experiencing workplace violence

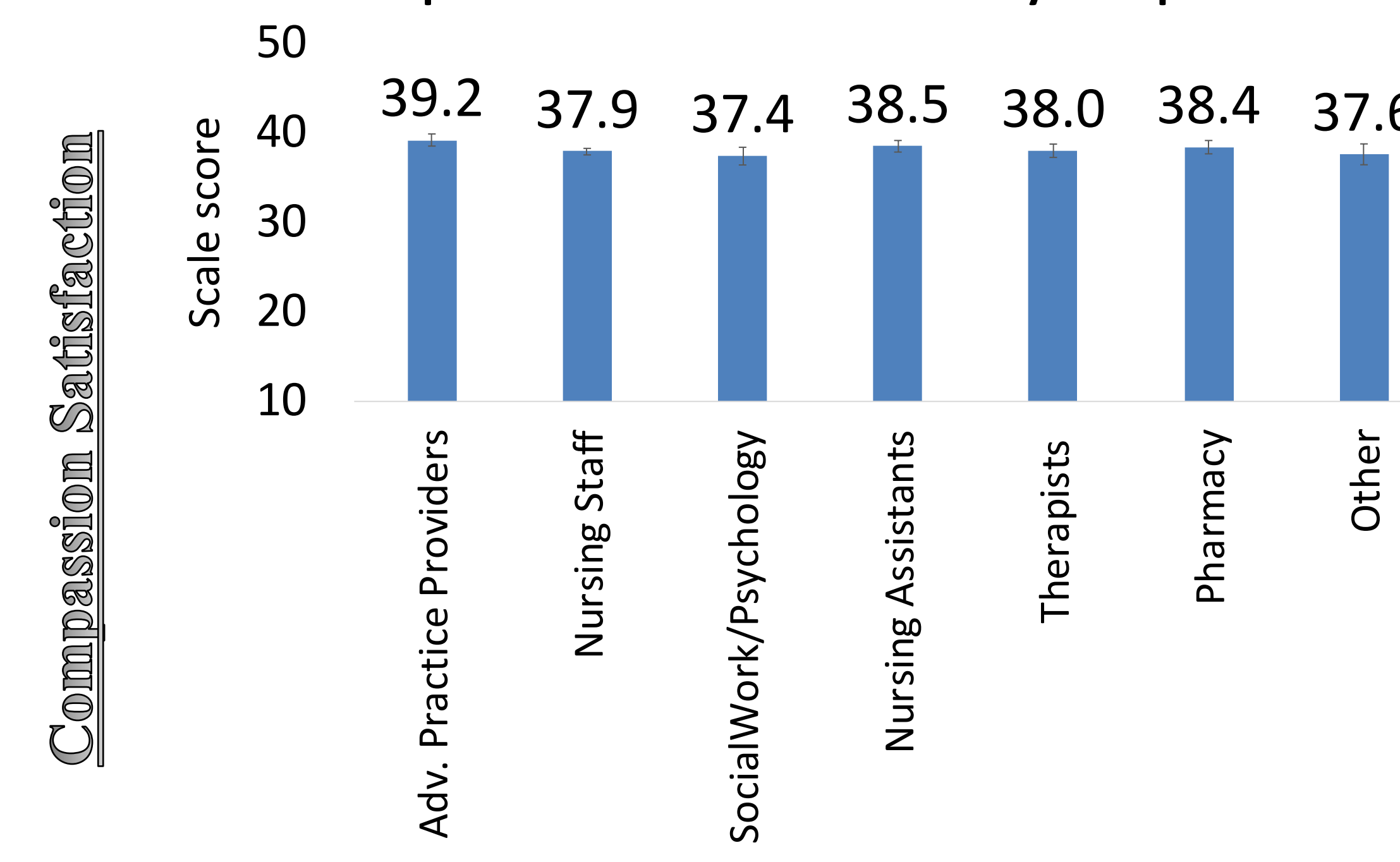
Discipline



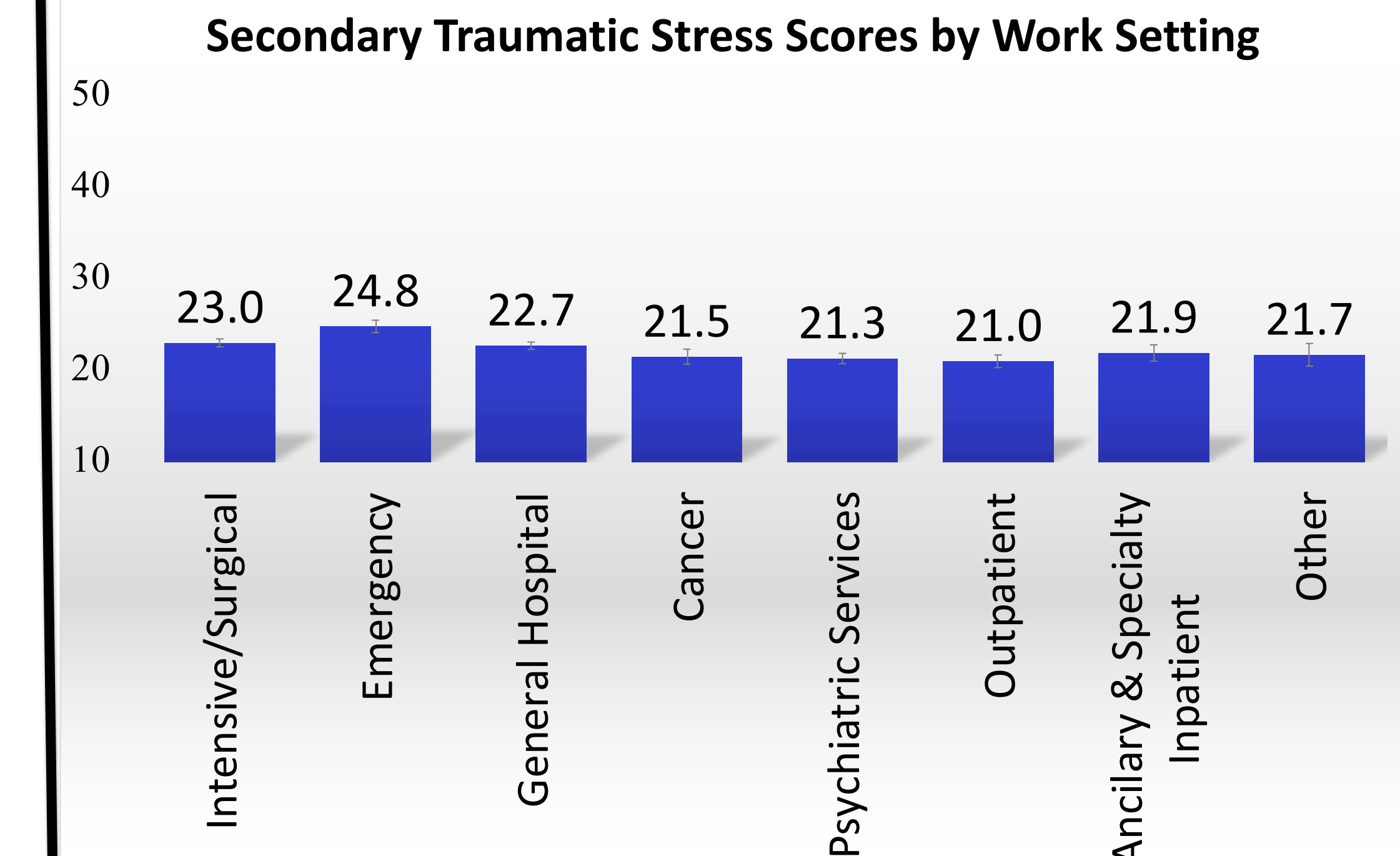
Burnout Scores by Discipline



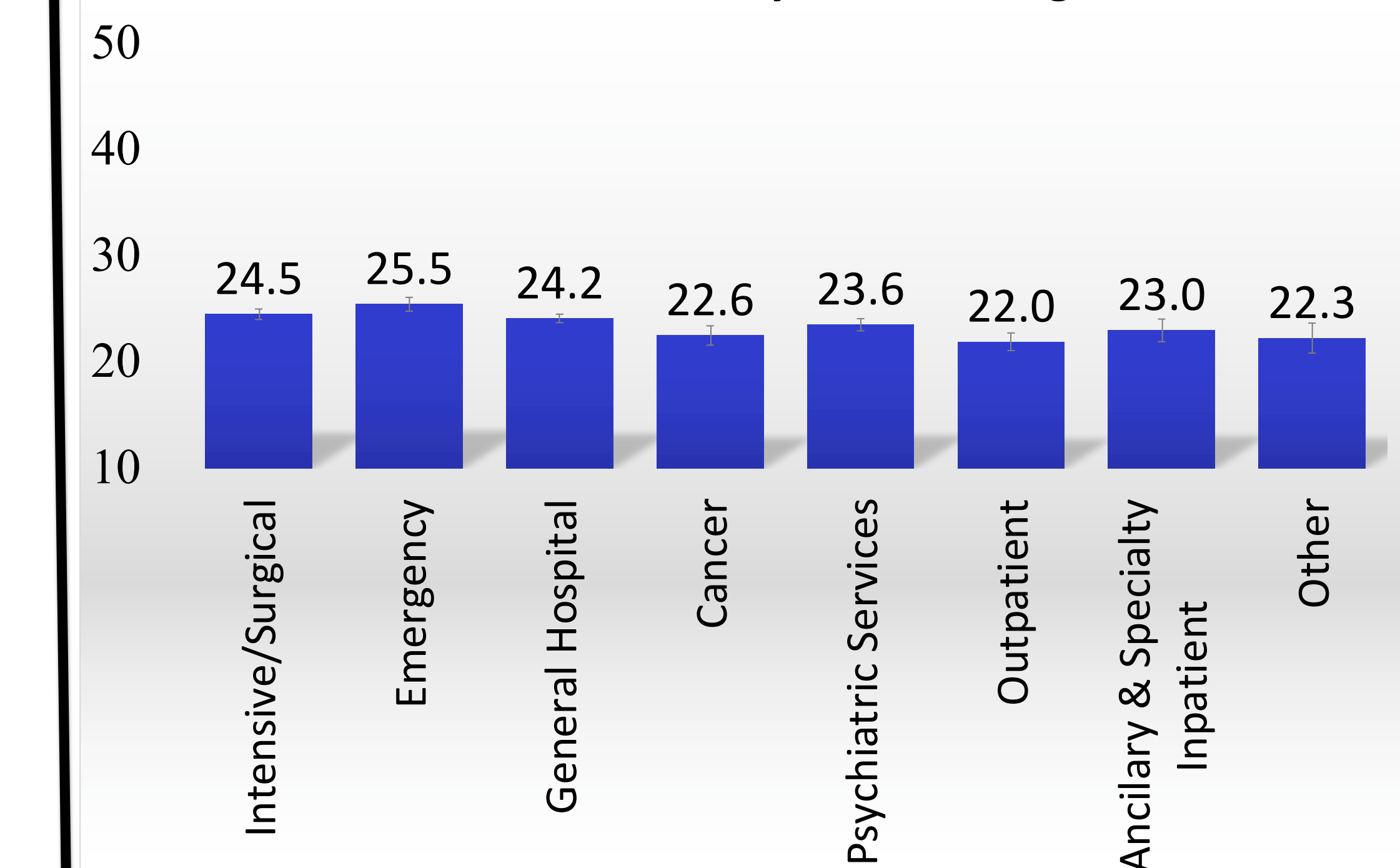
Compassion Satisfaction Scores by Discipline



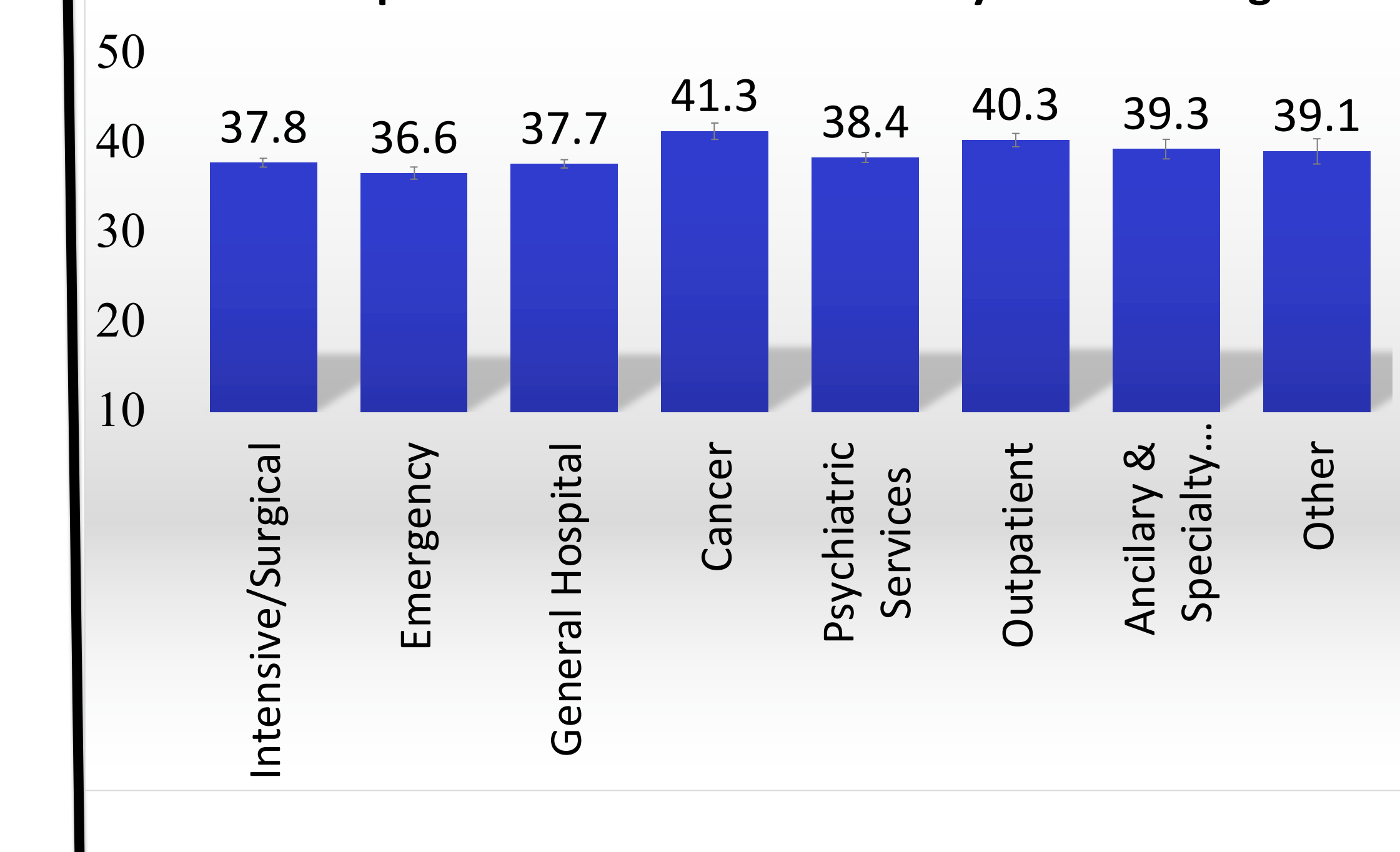
Work Setting



Burnout Scores by Work Setting



Compassion Satisfaction Scores by Work Setting



IMPLICATIONS

Implications for Psychiatric-Mental Health Nursing:

- Unique demographic, work-related, and behavioral variables are associated independently with STS, Burnout and CS
 - Organizational approaches should be employed to address modifiable work-related and behavioral covariates of STS, Burnout and CS
- ### Implications for Research:
- Future research may determine disciplinary- and work-setting specific interventions to reduce the experience of STS and burnout while enhancing CS among health care workers.