



Adapting Clinical Medical Education During the COVID-19 Pandemic: The Personal Impact of COVID-19 Infection on Patients Post-Discharge

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Background

- A Novel Approach to Clinical Education During a Pandemic:
 - March of 2020: the COVID-19 pandemic resulted in a pause of clinical rotations for CU Medical students. To conserve resources and to reduce overall exposure, clinical educators adapted a new model that allowed for meaningful involvement in patient care in a safe format. An innovative approach to a transition of care quality improvement (QI) project was created.
 - There are few reports in the literature of utilizing a QI project during times of stress, such as during a pandemic, to learn about the patient experience of recovering from a disease to improve patient outcomes.
- The COVID-19 Discharge Project:
 - Growing literature on the personal, financial, emotional and relational impact of COVID-19
 - Most focus on healthcare workers
 - Isolation, anxiety, and depression are associated with adverse outcomes in patients with other diseases
 - Chronic Diseases
 - SARS, MERS
 - There is little research examining the impact of hospitalized COVID-19 patients after discharge

Objectives

- Evaluate the course of disease and effects of COVID-19 on hospitalized patients after discharge
- Create a clinical experience for medical students continue learning during a pandemic by evaluating patient care, improving the transition of care process, and gaining knowledge about the patient experience of recovery.

Methods

- Study Population: All patients hospitalized with COVID-19 at UCH Memorial Central and North Hospitals from March-September of 2020 were identified for inclusion.
- Medical students reviewed patient's charts, obtained verbal consent and administered a questionnaire about the experience of recovering from COVID-19, specifically: time to resolution, admission duration, symptom burden, treatment received, comorbidities, and personal, emotional, and social impact.
- REDCap Database
- Study dates: April 25 to September 30
- IRB exemption

Data Analysis

- Thematic analysis was conducted for responses to personal impact and worries.
- Two investigators coded responses on separate occasions and achieved code consensus
- The themes were also categorized as positive or worry-based

Results

- Demographics of Study Population
 - 164 patients were identified
 - 52.4% male
 - 96.3% hospitalized
 - 94.9% having a recorded positive COVID-19 test
 - Of those, 66 answered and consented to complete the interview

Figure 1. Qualitative Themes and Percent Frequency

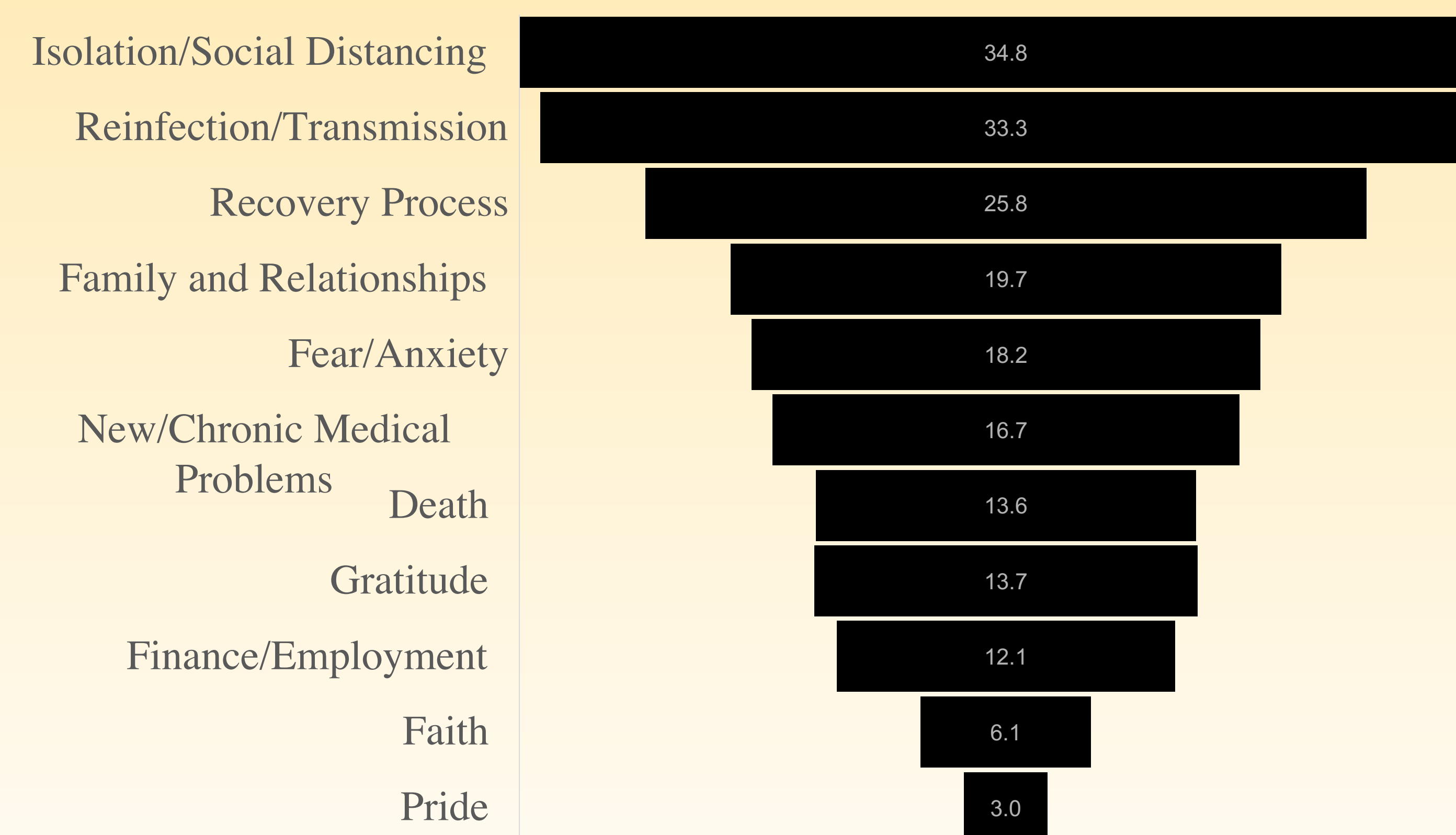
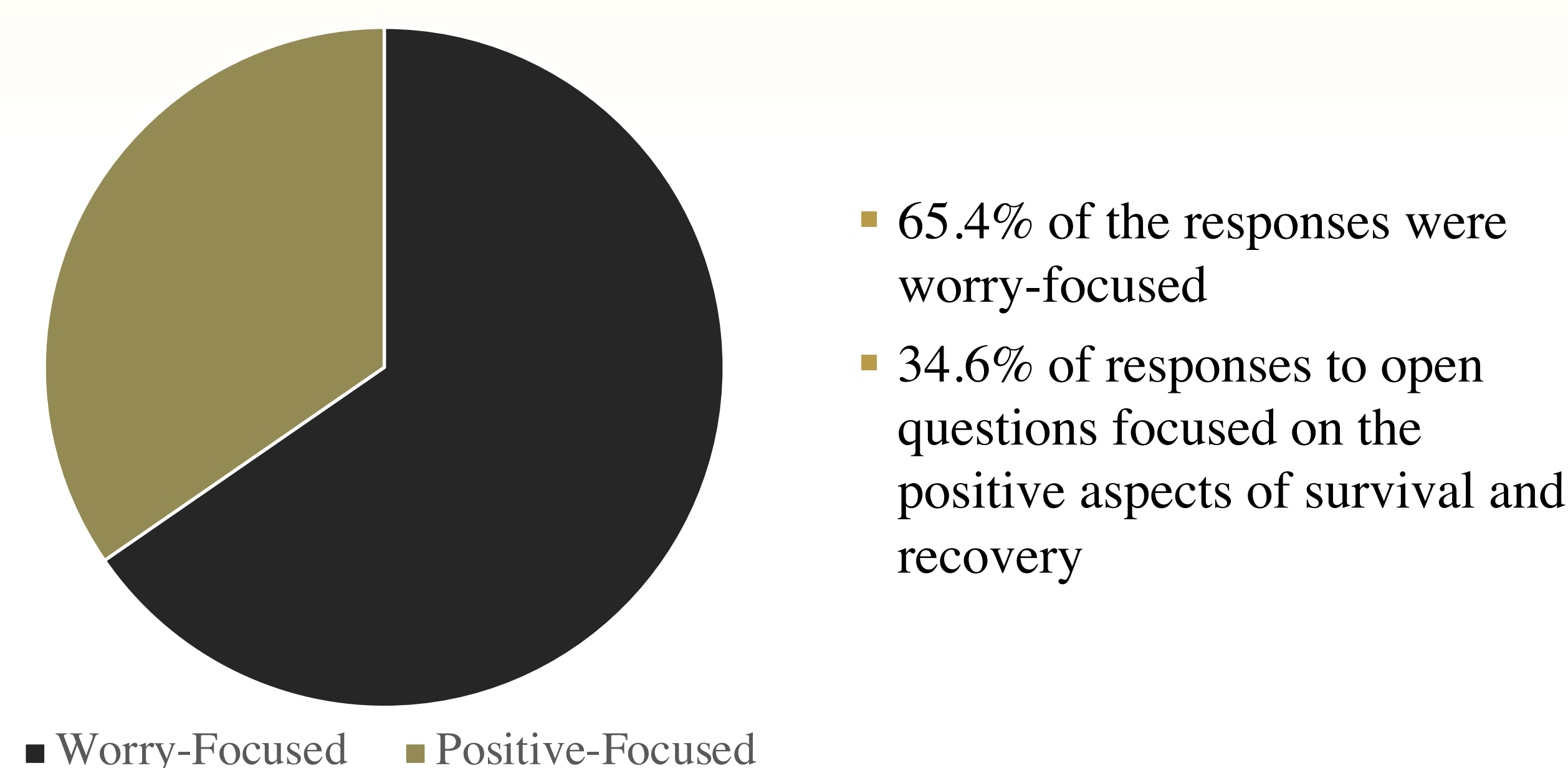


Figure 2. General Theme Categories



“Tell me about how having COVID-19 has affected your life and well-being.”

“What worries you the most?”

Discussion

- Of the 164 patients identified, 66 consented to be interviewed. Medical students presented data on hospitalization and qualitative themes to executive leadership to improve systems related to care of COVID-19 patients. The transition of care process was changed to improve patient outcomes including adding mental well-being resources when significant themes of emotional distress were discovered. Stories of patient appreciation were shared with care teams to improve morale. Themes of the beneficial impact of this project on students included: ability to learn long term outcomes of a novel pandemic, learn from patients in a longitudinal format, connect with isolated patients, develop skills of connecting through phone contact with patients, learn from chart review process and empower students as experts in a novel pandemic. Two additional Quality Improvement projects were started by students based on themes of the patient experience.
- Study Conclusions:

- | <u>Benefits</u> | <u>Limitations</u> |
|--|--|
| ➢ Inexpensive | ➢ Difficulty reaching patients |
| ➢ Personal touch | ➢ Lack of visual aids |
| ➢ Allow us to probe for answers, uncovering details not apparent in static surveys | ➢ Data does not include patients who died while hospitalized |
| ➢ Student Education | ➢ Variable and incomplete recall by patients |

Conclusions

We believe this study was a success in achieving its objectives. Students found this project to be a meaningful way to continue to improve clinical skills and participate in patient care during the unique challenges of a pandemic. Students were directly involved in the discovery and dissemination of knowledge of a novel pandemic and were empowered to advocate for patients as experts in the patient experience. More study of the beneficial impact of learning in this model is likely warranted.