

The Effect of Empathy, Attitudes Toward Suicide, and Peer Influence on Medical Students' Perception of Suicide Risk

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Introduction

- Suicide is a leading cause of death among adolescents and young adults in the United States.^{1,2}
- Despite growing awareness, many medical students feel unprepared to assess and manage suicide risk effectively.³
- Stigma toward suicide prevention may influence decision-making, and the role of empathy and peer influence in discharge decisions is unclear.^{4,5}
- This study examines how empathy, attitudes toward suicide prevention, and peer influence affect medical students' clinical assessments of suicide risk, recovery potential, and discharge decisions.

Aims and Objectives

- Compare discharge timing between peer-influence and control groups
- Compare empathy and stigma scores between students who chose to discharge the patient versus those who did not discharge the patient
- Examine the role of suicide risk and recovery ratings in discharge decisions

Methods

- 65 medical students from a Midwestern U.S. medical school completed a vignette-based survey.
- Participants were randomized to either a peer influence group, in which a peer explicitly endorsed patient discharge, or a control group without peer input.
- They assessed suicide risk and recovery likelihood on a sliding scale (1 = minimum risk/recovery chances to 100 = maximum risk/recovery chances), as well as discharge decisions for a hypothetical patient across five time points.
- Students completed validated measures of empathy (QMEE: Questionnaire Measure of Emotional Empathy) and attitudes toward suicide prevention (ATSP: Attitudes Toward Suicide Prevention Questionnaire). Analyses included a series of independent-sample t-tests. Significance was set at $p < 0.05$.

Peer Influence and Discharge Decision

- Peer influence did not significantly affect discharge timing ($t_{63} = -1.17$; $p = 0.245$) (Fig.1).

Figure 1: Discharge Point by Group

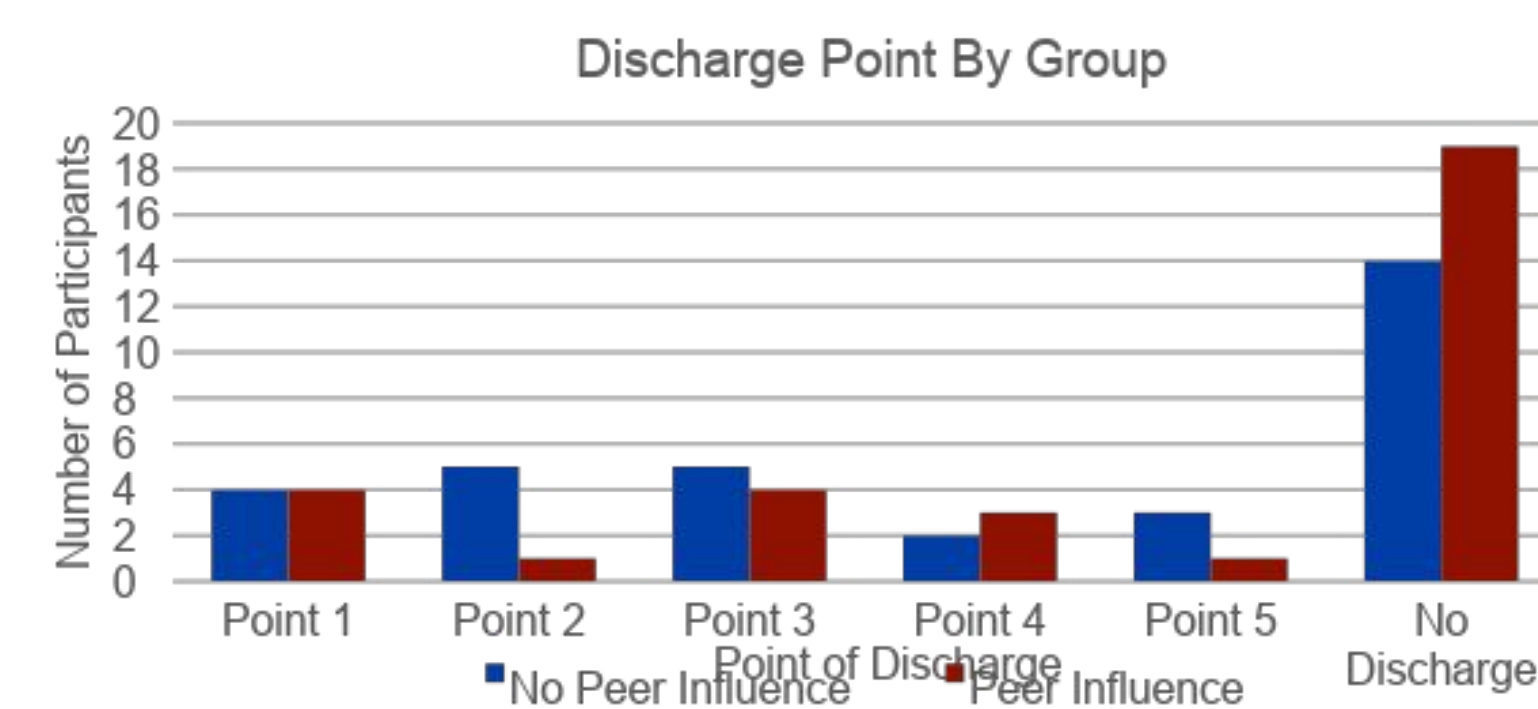


Figure 1. Number of participants who chose to discharge the patient at each time point or never discharged. Discharge patterns are displayed for both the No Peer Influence group (blue) and the Peer Influence group (red).

Attitudes Towards Suicide and Discharge Decision

- Participants who chose not to discharge the patient at all time points, no matter what the patient insisted in the vignettes, had significantly less negative attitudes toward suicide prevention (mean = 2.01, SD = 0.29; $n = 33$) than those who discharged (mean = 2.29, SD = 0.50; $n = 32$) ($t_{63} = 2.833$; $p = 0.06$) (Fig.2).

Figure 2: Mean ATSP Score vs. Discharge Decision

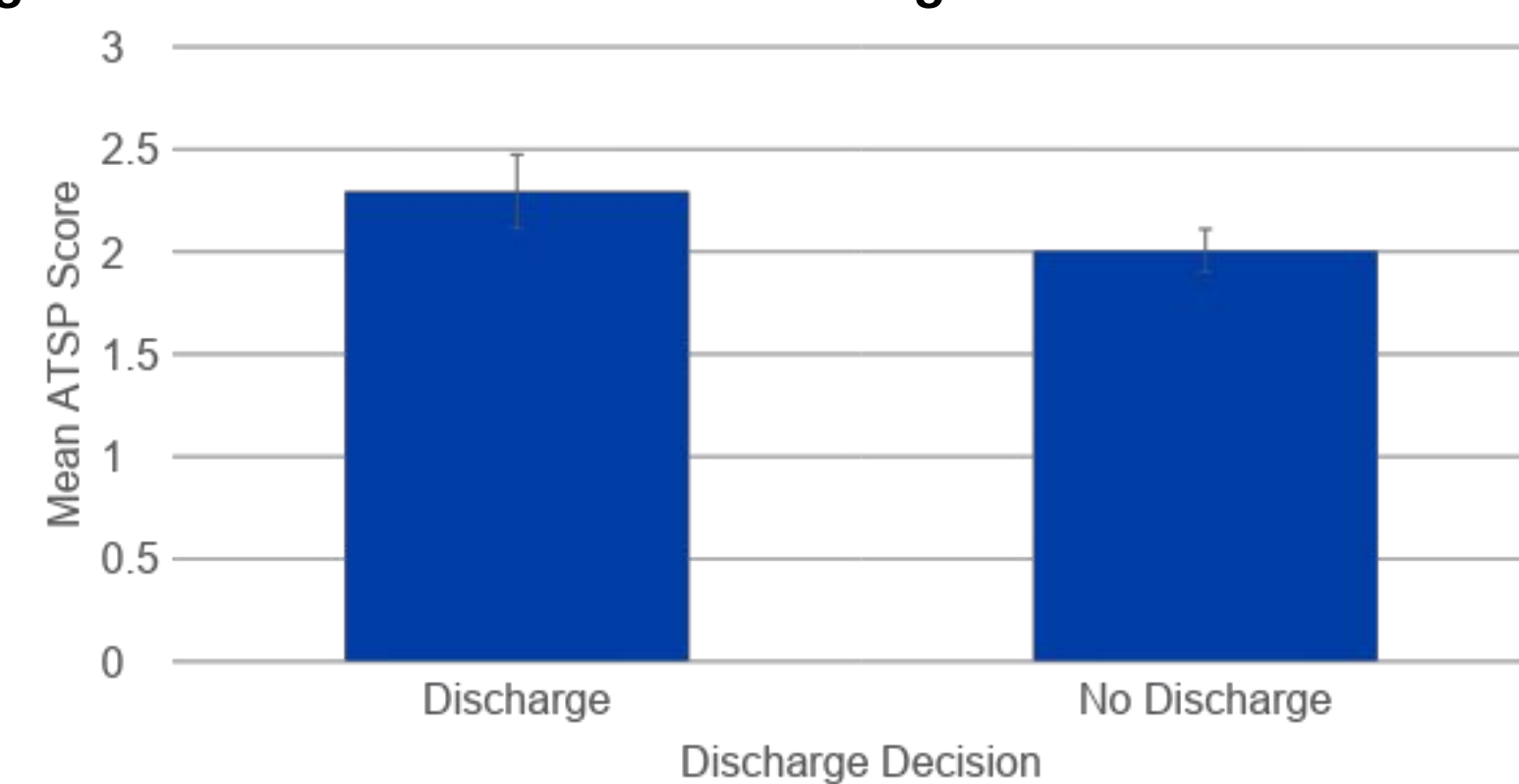


Figure 2. Mean ATSP scores by discharge decision. Students who discharged the patient reported significantly more negative attitudes toward suicide prevention than those who did not. Error bars represent 95% confidence intervals.

Empathy and Discharge Decision

- Empathy did not differ significantly by discharge decision ($t_{63} = -0.38$; $p = 0.71$) (Fig.3).

Figure 3: Mean QMEE Score vs. Discharge Decision

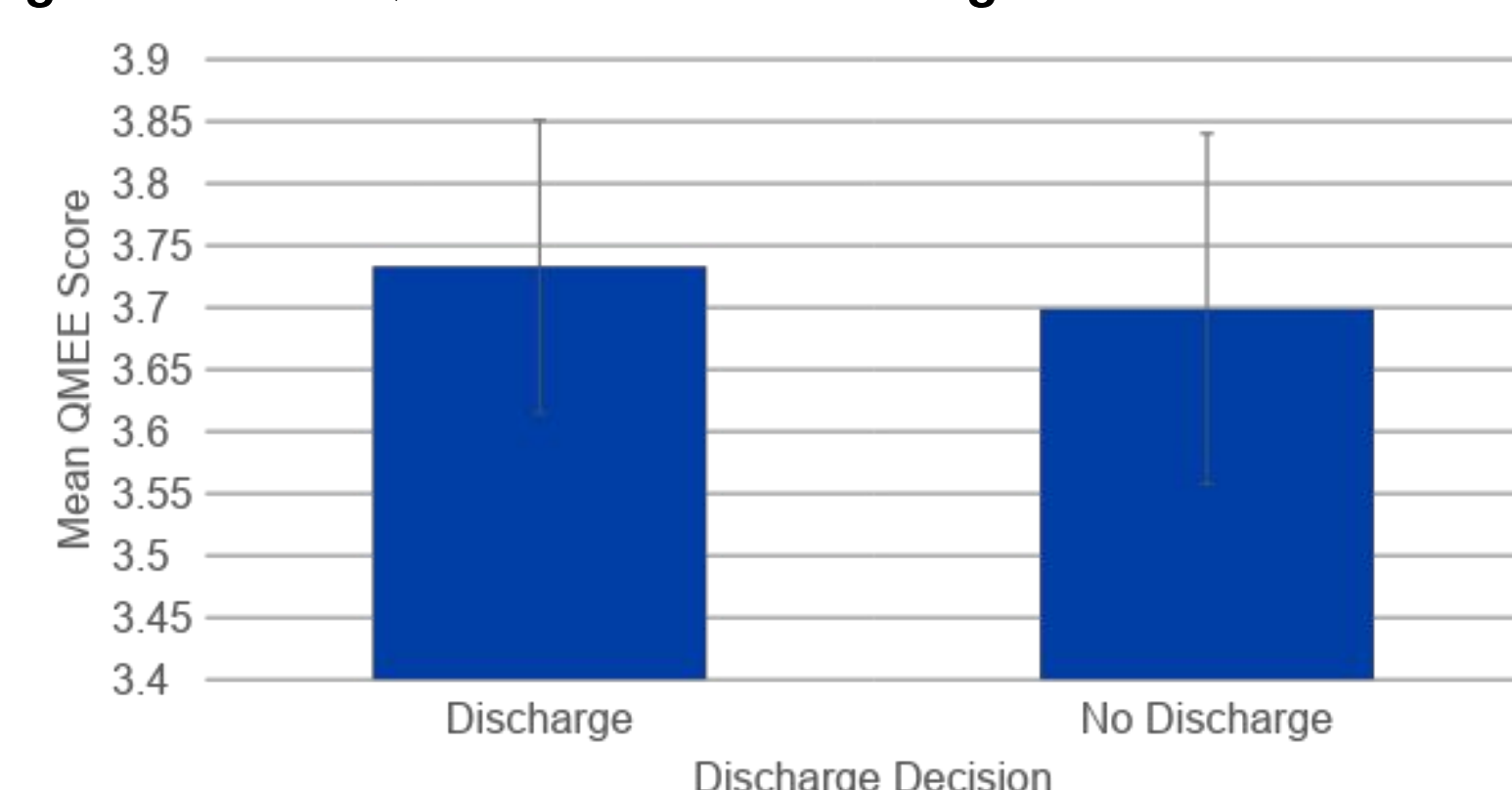


Figure 3. Mean QMEE scores by discharge decision. No significant differences in empathy were observed between those who discharged and those who did not. Error bars represent 95% confidence intervals.

Results

Risk and Recovery Ratings

- Participants who discharged rated significantly lower risk than those who did not (Fig.4). Figure 5 shows a similar trend; however, it indicates that there are more variabilities in risk assessment among participants under peer influence.

Figure 4: Suicide Risk Ratings Over Time (Point 1 to Point 5) — No Peer Influence Group

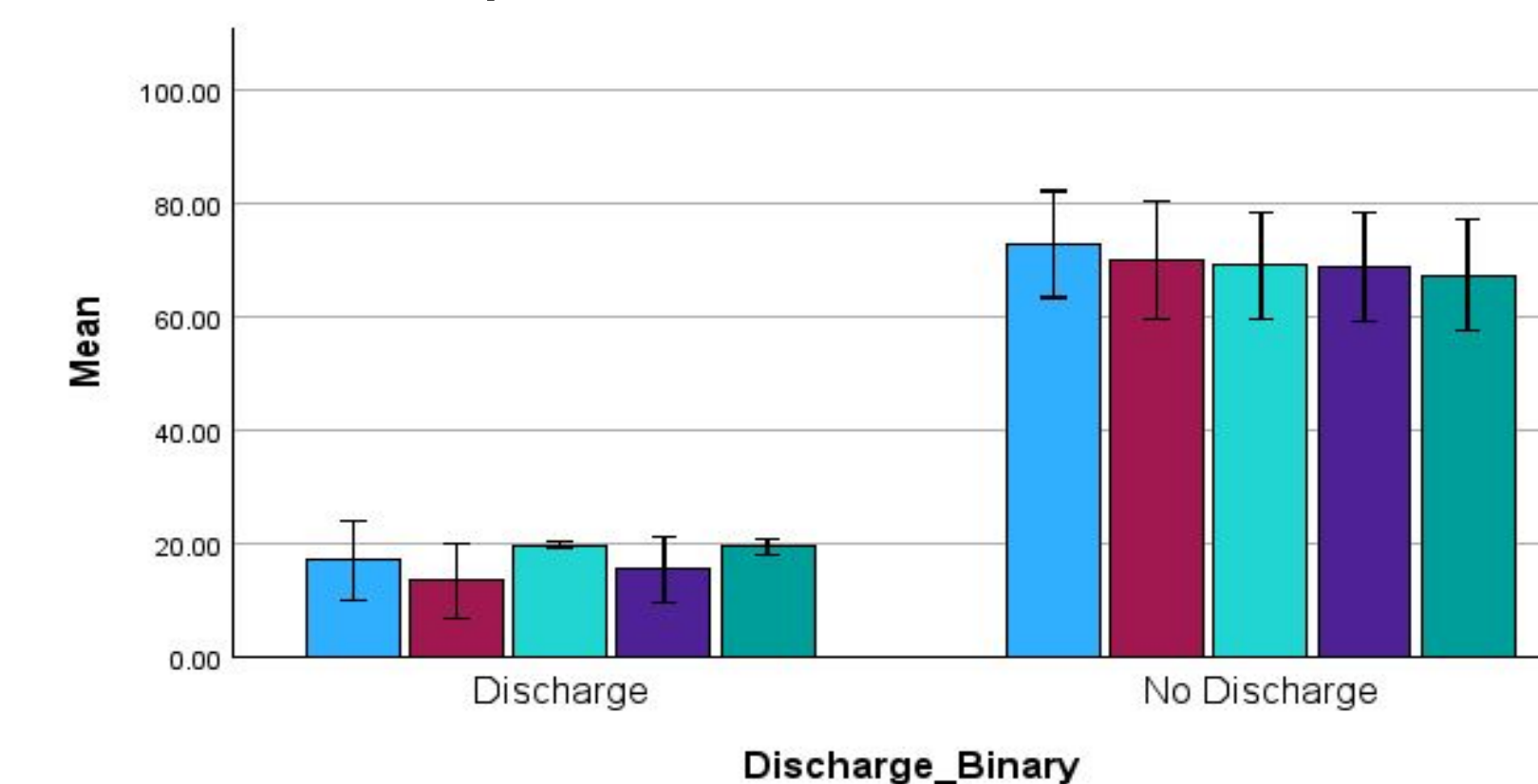


Figure 4. Mean suicide risk ratings across five vignette time points between those who discharged and those who did not in the no peer influence condition. Error bars represent standard error. Each bar is displayed in ascending order from Point 1 to Point 5.

Figure 5: Suicide Risk Ratings Over Time (Point 1 to Point 5) — Peer Influence Group

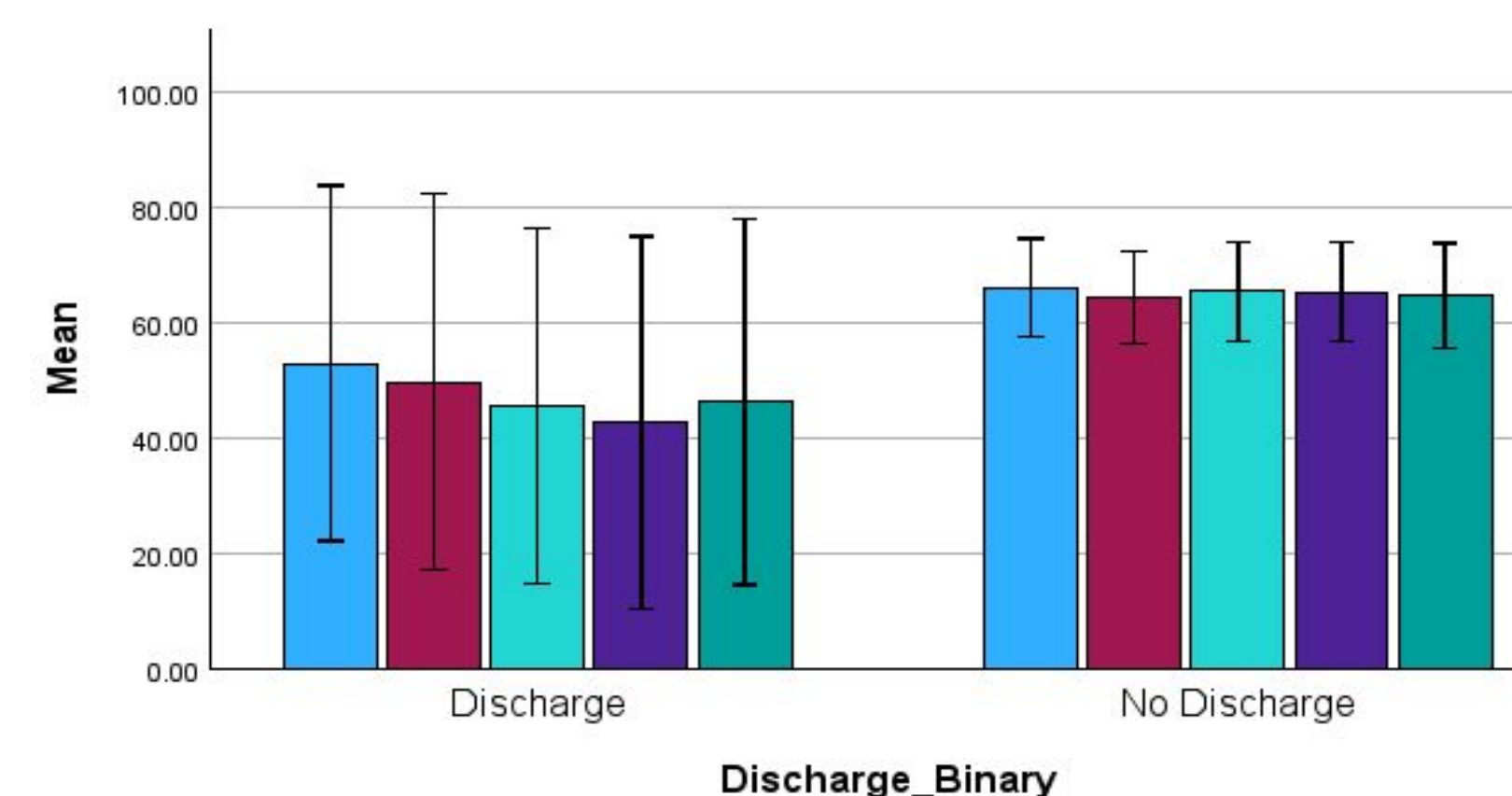


Figure 5. Mean suicide risk ratings across five vignette time points between those who discharged and those who did not in the peer influence condition. Error bars represent standard error. Each bar is displayed in ascending order from Point 1 to Point 5.

- On the other hand, there were no significant differences in the levels of recovery expectations depending on the decisions of discharge (Fig.6 and Fig.7).

Figure 6: Suicide Recovery Expectation Ratings Over Time (Point 1 to Point 5) — No Peer Influence Group

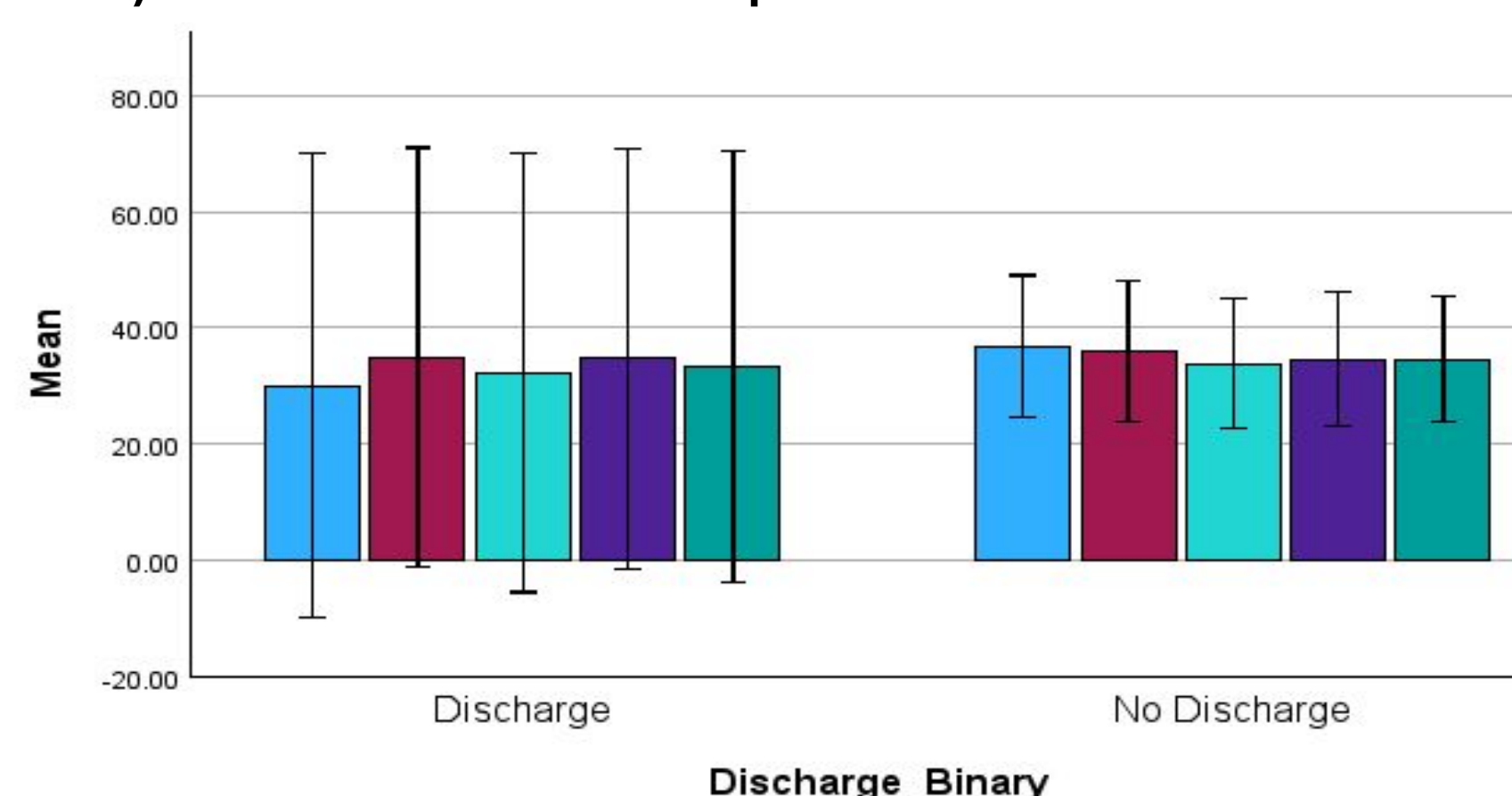


Figure 6. Mean suicide recovery expectation ratings across five vignette time points in the no peer influence condition. Error bars represent standard error. Each bar is displayed in ascending order from Point 1 to Point 5.

Figure 7: Suicide Recovery Expectation Ratings Over Time (Point 1 to Point 5) — Peer Influence Group

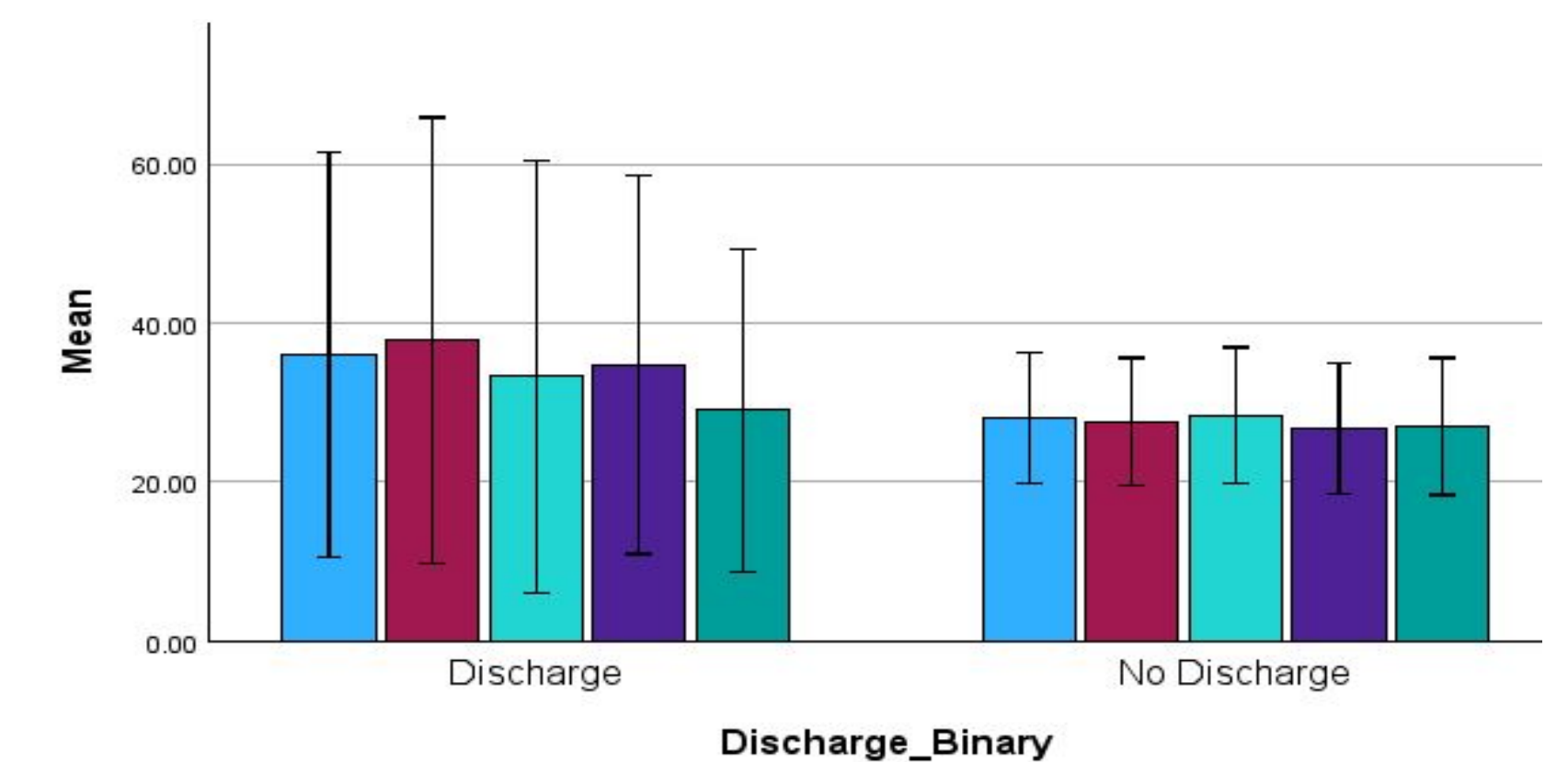


Figure 7. Mean suicide recovery expectation ratings across five vignette time points in the peer influence condition. Error bars represent standard error. Each bar is displayed in ascending order from Point 1 to Point 5.

Conclusions

- More negative attitudes toward suicide prevention and perception of lower risk were associated with a greater likelihood of discharge, whereas perception of recovery potential, empathy, or peer influence were not.
- Wide variability in risk assessment suggests lack of a consistent framework among trainees.
- These results emphasize the need for stigma-reduction training in medical education and greater awareness of how attitudes and context influence clinical decision-making in at-risk patients.
- Limitations of this study include: small institution and small sample size, predominantly preclinical students, use of a hypothetical vignette, no measure of participants' previous personal experiences with suicide

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