Evaluation of a Full-Day Cultural Competency Workshop for First-Year Dental Students and Residents

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INTRODUCTION:

- Cultural competency has become an essential part of training across the health professions
- To function successfully in a multicultural work environment, dental school graduates must be capable of managing a diverse patient population
- Many dental schools have instituted mandatory cultural competency workshops for incoming students; however, the effectiveness of these workshops has not been fully examined

OBJECTIVES:

To evaluate whether the full-day cultural competency workshop provided to first-year dental students (DDS-I) and residents (PGY-I) at the Columbia University College of Dental Medicine (CDM) is effective in raising global, social, and self-awareness and in building capacity to establish professional cross-cultural relationships with diverse populations.

METHODS:

Survey Development

- 10-item survey corresponding to the learning objectives of the workshop
- Cultural competency domains: awareness (2 items), knowledge (3 items), and skills (5 items)

Survey Distribution

- Paper survey
- Before and after workshop
- 2019 enrolling classes of PGY-I and DDS-I

Course Evaluation

 After workshop Most and least useful parts

Interview Process

- A semi-structured interview guide incorporating factors that influence student participation
- Faculty (n=2) and student (n=2) facilitator interviews

Data Analysis

- Univariate and bivariate analysis of students' responses using paired and student *t* tests (significance threshold $\alpha = .05$)
- Content analysis of facilitator interviews and student evaluations.

RESULTS:

Table 1: Descriptive Statistics of CDM DDS-I & PGY-I (2019 Enrolling Classes) Variable DDS-1 PGY-1 N (%) N (%) Age Mean (SD) 23.5 (2.05) 29.8 (4.54) Sex Male 18.0 (54.5) 38.0 (45.8) **Female** 45.0 (54.2) 12.0 (36.4) **US Born** Yes 61.0 (73.5) 14.0 (42.4) No 21.0 (25.3) 15.0 (45.5) Race White 13.0 (39.4) 52.0 (62.7) 3.00 (9.10) African-5.00 (6.00) American Asian 24.0 (28.9) 12.0 (36.4) American Indian 1.00 (1.20) 0.00(0.00)**Ethnicity** 5.00 (15.2) Hispanic 12.0 (14.5) Non-Hispanic 71.0 (85.5) 25.0 (75.8) Response Rate 81 (97.0) 24 (80.0)

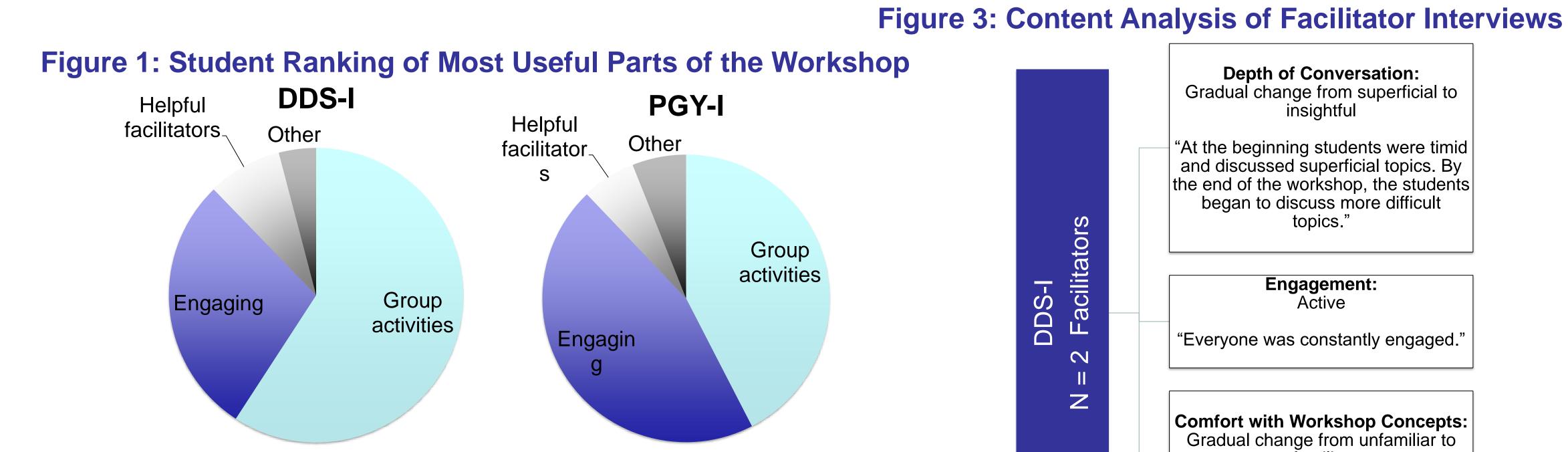
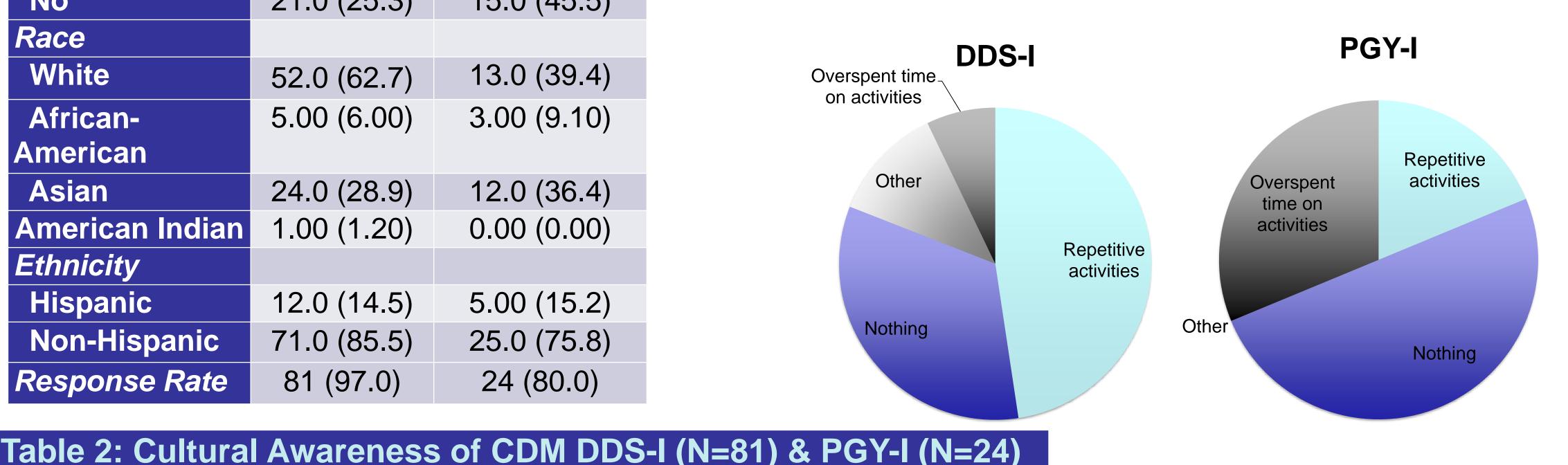
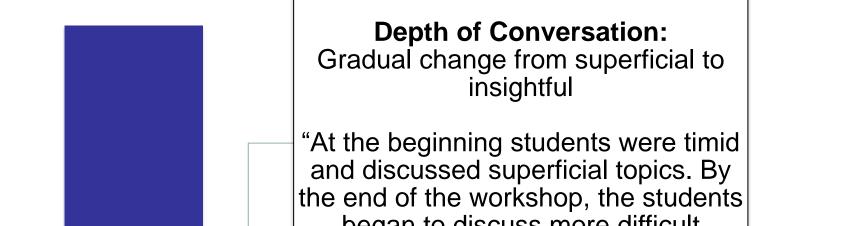


Figure 2: Student Ranking of Least Useful Parts of the Workshop





Facilitators

DDS-I

PG Fa

began to discuss more difficult topics."

Engagement: "Everyone was constantly engaged."

Gradual change from unfamiliar to familiar "Some students were unfamiliar with the concepts, while others understood

Comfort with Workshop Concepts:

the concepts and goals of the activities.

Depth of Conversation:

Superficial throughout

"Conversation did not go deeper. They kept very superficial.

"It is a great day if we have sushi and we get out early. It is a bad day if we have to stay here until the end."

Engagement: Passive

Comfort with Workshop Concepts: Unfamiliar

"Students were not entirely comfortable or familiar with the concepts."

CONCLUSIONS

- The full-day workshop achieved its goals of raising the students' cultural competency and their capacity to establish cross-cultural relationships
 - There was a statistically significant increase in both the DDS-I and PGY-I groups in overall cultural competency and a corresponding increase in the subcategories (awareness, knowledge, and skills) from pre- to post-workshop
 - The facilitator interviews revealed that the DDS-I students were more insightful, engaged, and familiar with workshop concepts than the PGY-I students. This could be a reflection of their backgrounds and difference in age
 - Student perceptions of the workshop in both groups were similar in the most and least useful aspects of the workshop
 - A future follow-up study is needed to assess long term retention of the reported improvement and application in the clinical setting with patients

(2019 Enrolling Classes) DDS-1 PGY-1 **Mean-Diff** Independent **Cultural Awareness** Mean (SD) Mean (SD) Mean (SD) **T-Test** Knowledge **Pre-Workshop** 6.33 (0.64) 0.482 6.21 (1.05) -0.12 (0.23) **Post-Workshop** 6.93 (0.98) 0.968 6.92 (0.97) 0.009 (0.23) **Mean Difference** 0.72 (1.13) 0.58 (0.93) P Value (Paired t-test) <.001 .005 Awareness **Pre-Workshop** 0.075 0.580 11.9 (1.56) 11.3 (1.31) (0.35)**Post-Workshop** 14.0 (2.03) 0.753 -0.14 (0.40) 13.8 (1.61) **Mean Difference** 2.63 (1.91) 1.90 (1.85) P Value (Paired t-test) <.001 <.001 Skills **Pre-Workshop** 11.7 (1.61) 11.3 (1.54) 0.271 0.404 (0.37)**Post-Workshop** 13.9 (1.69) 13.9 (2.05) 0.955 0.026 (0.41)**Mean Difference** 2.25 (1.88) 2.63 (1.95) P Value (Paired t-test) <.001 <.001 Overall 29.8 (3.47) **Pre-Workshop** 28.9 (3.15) 0.86 (0.79) 0.257 **Post-Workshop** 34.6 (3.84) 34.8 (4.78) -0.11 (0.95) 0.909

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Mean Difference

P Value (Paired t-test)

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5.83 (4.23)

<.001

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4.86 (3.87)

<.001