Student Engagement Across Learning Activities

Study Details

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Survey and Interpretation

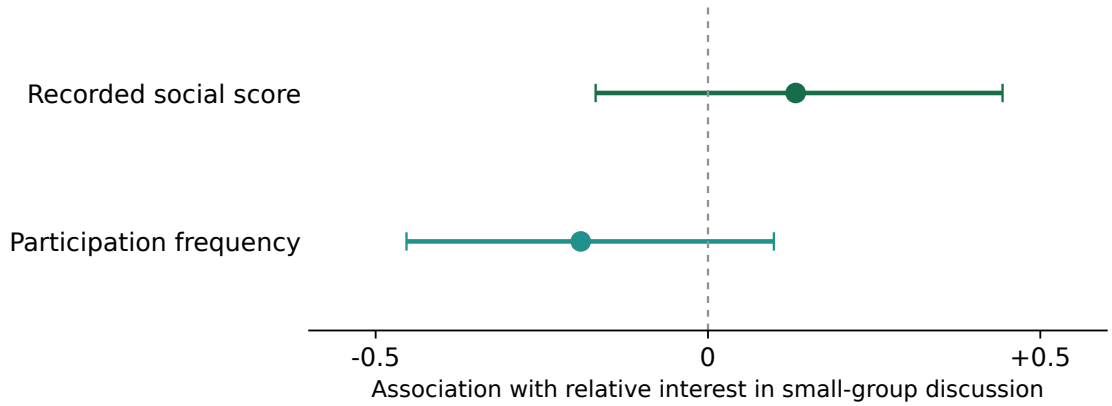
The one-time in-class survey includes 43 students in 3 discussion sections (March 29-30, 2017). Students rated small-group discussion, big-group discussion, a debate on globalization, and a campus field trip on a 1-5 scale for interest, informativeness, and encouragement of critical thinking. Responses marked "Didn't attend" are excluded from comparisons involving that activity. Each comparison uses students with both required ratings.

The figures show individual ratings and descriptive associations. Equal original ratings share one color, and other colors identify the higher-rated activity or dimension. Small random offsets reveal overlapping integer responses. Correlations use the original scores. The scatter plots omit numeric interval annotations. The social-response figure shows uncertainty with horizontal intervals.

Social Preferences and Discussion Formats

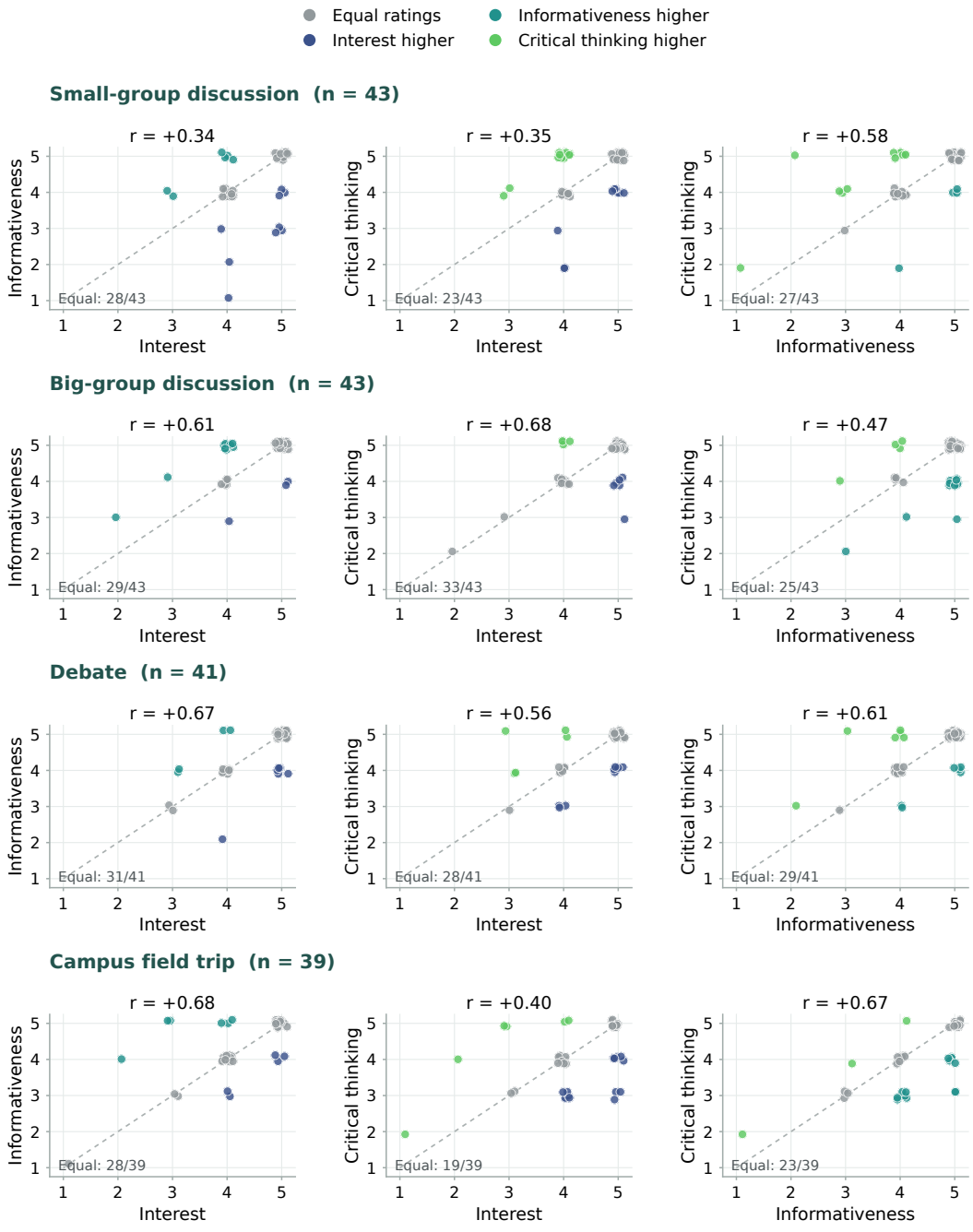
The recorded social responses do not clearly distinguish relative interest in the two discussion formats. Both estimates in Figure 1 are imprecise. The intervals include zero and also allow moderate associations.

Figure 1. Social Responses and Relative Interest in Small-Group Discussion



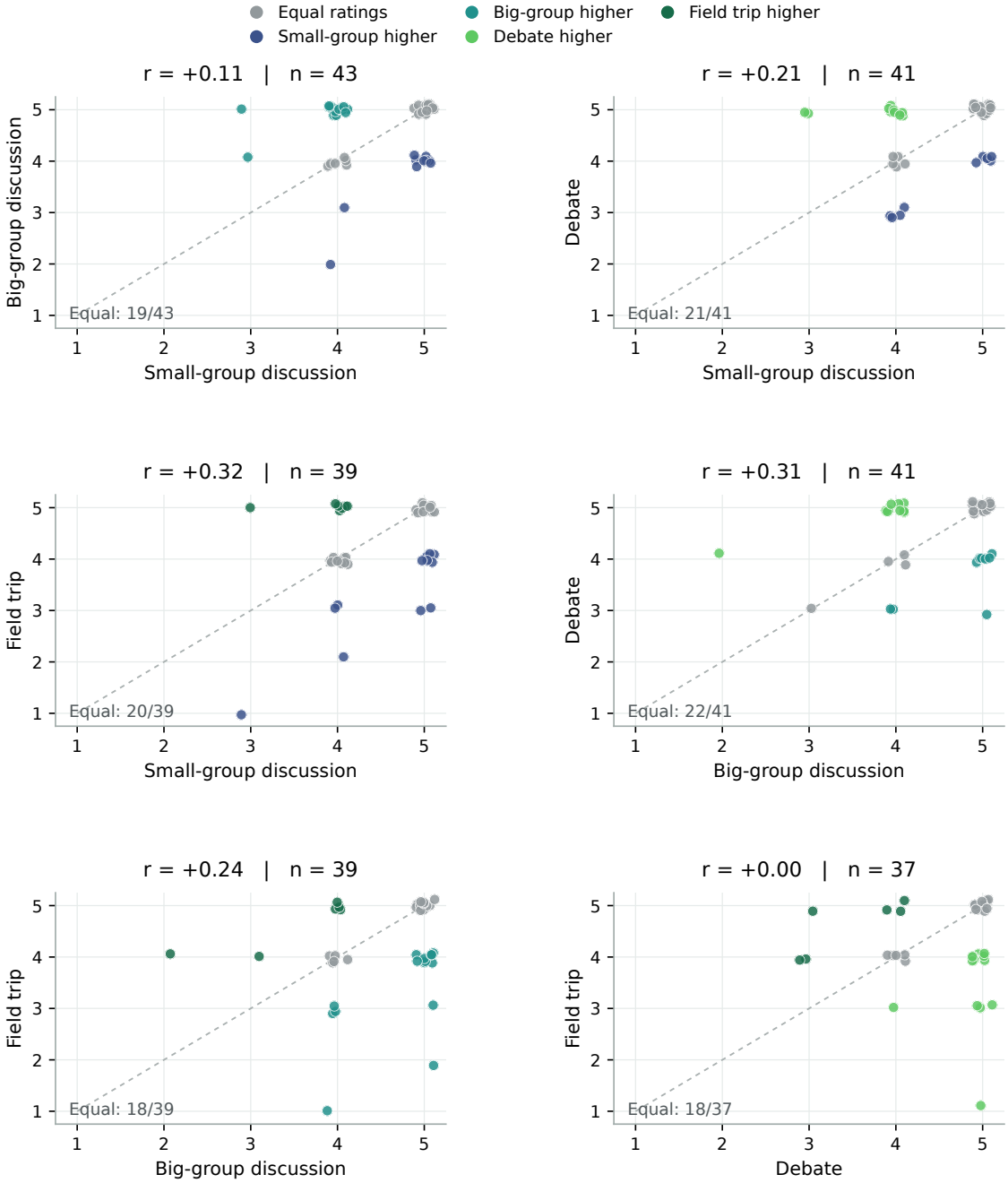
Notes. The outcome is interest in small-group discussion minus interest in big-group discussion. Points show Spearman rank correlations with the two recorded responses. Lines show 95% percentile intervals from 10,000 student-bootstrap draws, with ranks recomputed in each draw. The dashed line marks zero association. All 43 respondents answered these items. The social-preference score retains its original numeric coding because its endpoint labels are unavailable. Its direction remains unassigned. Participation preserves the ordering of the labeled categories. Source: original GEOG 122 survey responses.

Figure 2. Ratings of Different Dimensions Within Each Activity



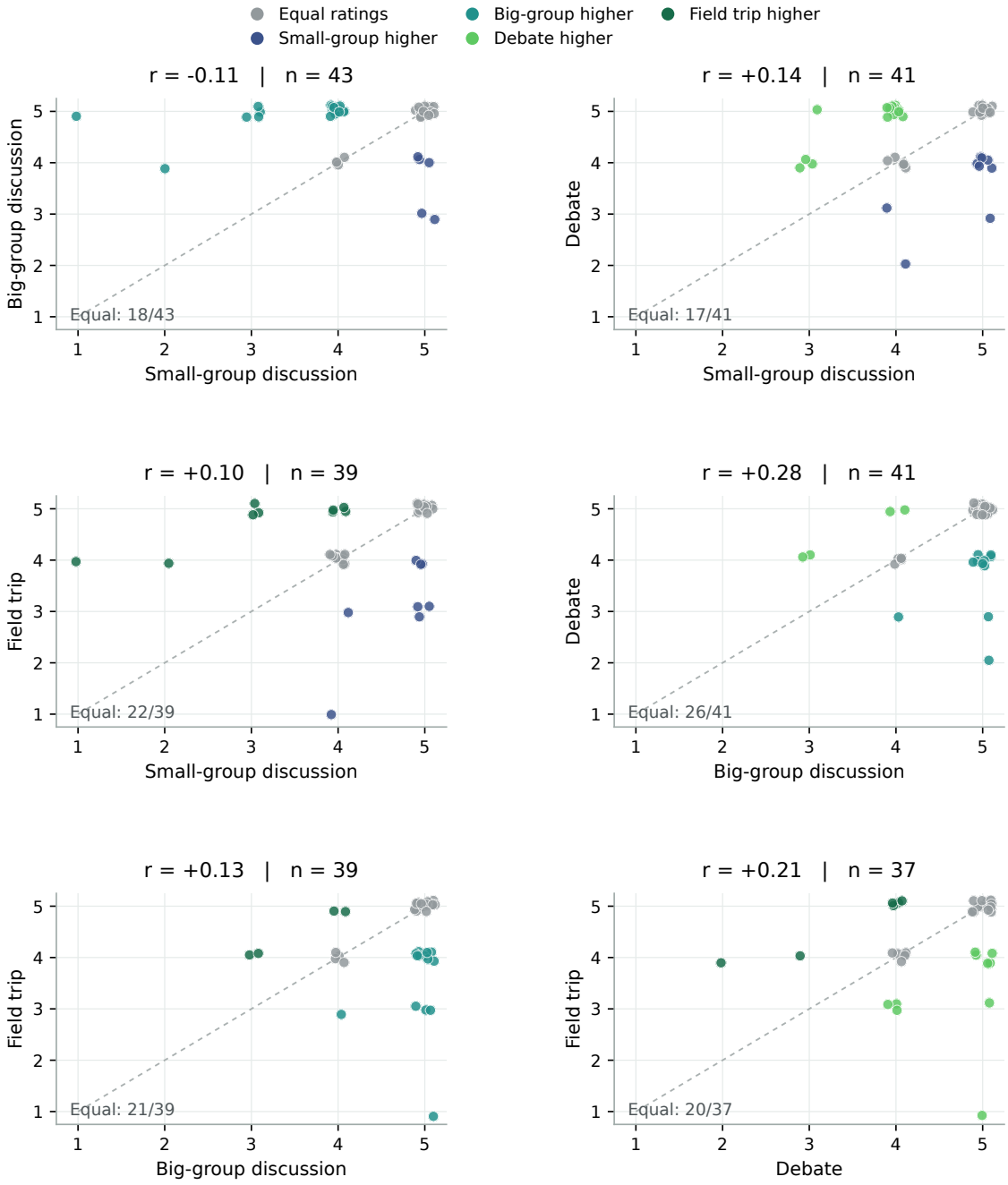
Notes. Each dot is one student's pair of ratings. Colors identify equal original scores or the dimension with the higher score. The dashed line marks equality. Small offsets reveal overlapping responses. Each activity uses students with all three ratings observed. Pearson correlations (r) use original scores. Source: GEOG 122 survey, UBC, 2017.

Figure 3. Interest Ratings Across Activities



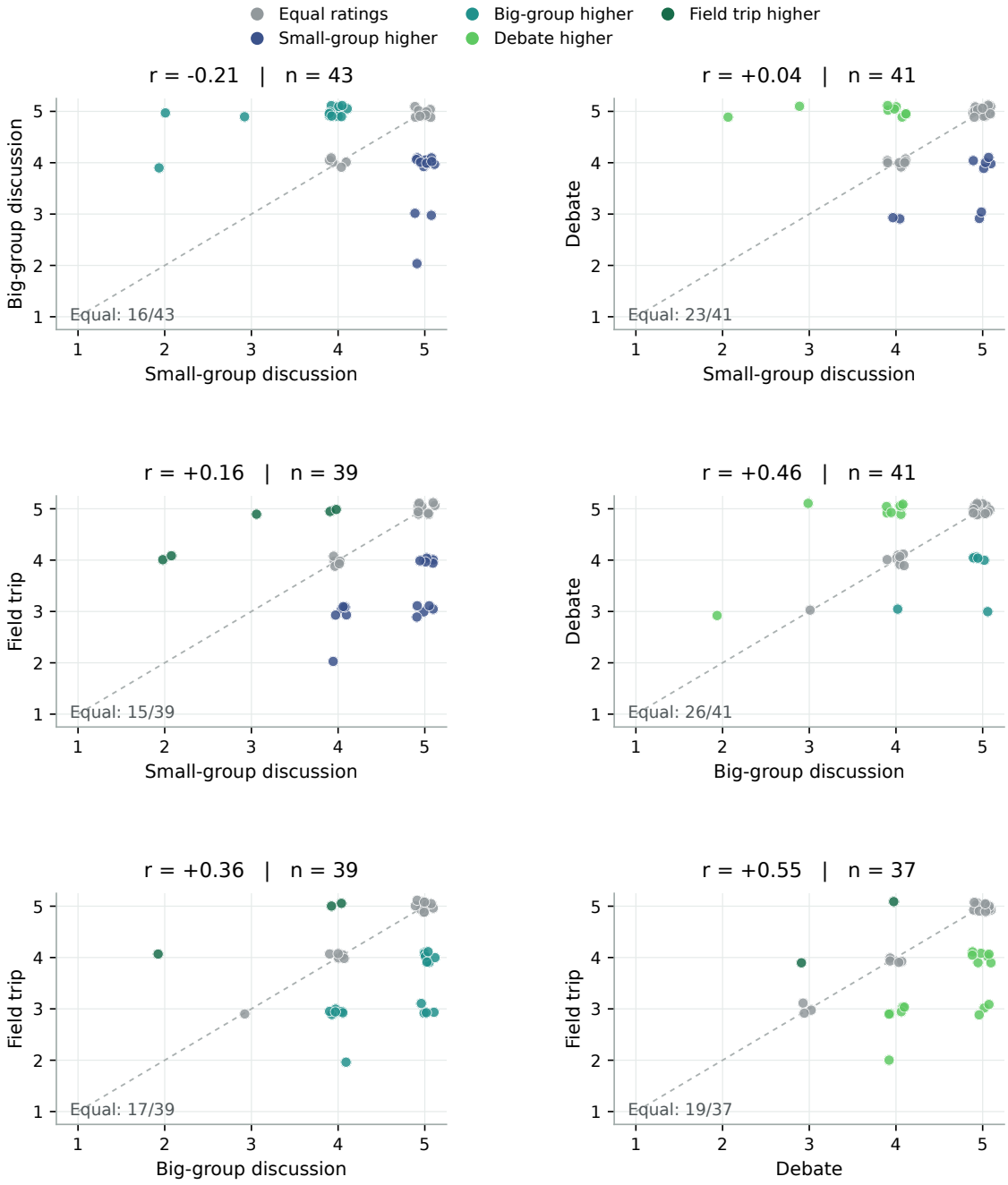
Notes. Each dot compares the same student's interest ratings for two activities. Colors identify equal scores or the activity with the higher original rating. The dashed line marks equality. Display offsets reveal overlap. Each panel includes students who rated both activities. Pearson correlations use original scores. Source: GEOG 122 survey, UBC, 2017.

Figure 4. Informativeness Ratings Across Activities



Notes. Each dot compares the same student's informativeness ratings for two activities. Colors identify equal scores or the activity with the higher original rating. The dashed line marks equality. Display offsets reveal overlap. Each panel includes students who rated both activities. Pearson correlations use original scores. Source: GEOG 122 survey, UBC, 2017.

Figure 5. Critical-Thinking Ratings Across Activities



Notes. Each dot compares the same student's ratings of how much two activities encouraged critical thinking. Colors identify equal scores or the activity with the higher original rating. The dashed line marks equality. Display offsets reveal overlap. Each panel includes students who rated both activities. Pearson correlations use original scores. Source: GEOG 122 survey, UBC, 2017.