Summary of the Analysis

Explanation:
Since we already have too many variables with random intercept, including interaction term will further complicate the interpretation of the model and how the variables influence the scores for Classic and Popular. After all, music should be nice and simple, but not complex and ugly. Therefore, although the model with interaction fits the data better, I decide to use the best model without interaction to report to Dr.Jimenez.

Summary for the Ratings of Classic:
All three main experimental factors have significantly influence on the ratings of Classic.
Holding other variables fixed:
1. HarmonyI-V-VI has on average 0.81835 higher score for Classic than HarmonyI-IV-V
2. Instrumentpiano has on average 1.45442 higher score for Classic than Instrumentguitar
3. Instrumentstring has on average 3.21452 higher score for Classic than Instrumentguitar
4. Voicepar3rd has on average 0.40374 lower score for Classic than contrary
5. Voicepar5th has on average 0.38358 lower score for Classic than contrary
6. Every unit score increase of ClsListen on average predict 0.17145 higher score for Classic
7. ConsNotes and PianoPlay are for controlling confounding effect

Summary for the Ratings of Popular:
All three main experimental factors have significantly influence on the ratings of Popular
Holding other variables fixed:
1. HarmonyI-V-VI has on average 0.80253 higher score for Classic than HarmonyI-IV-V
2. Instrumentpiano has on average 1.44405 higher score for Classic than Instrumentguitar
3. Instrumentstring has on average 3.18383 higher score for Classic than Instrumentguitar
4. Voicepar3rd has on average 0.41273 lower score for Classic than contrary
5. Voicepar5th has on average 0.40075 lower score for Classic than contrary
6. Every unit score increase of X16.minus.17 on average predict 0.09614 lower score for Classic
7. ConsNotes is for controlling confounding effect

Discussion on Random Effect:
      It seems that the size of variance component for person/Instrument is big and even comparable to the estimated residual variance, which means the kind of person/Instrument has a large influence on the intercept. Different kinds of this combination may have intercept that varies greatly. And the variance component for person/Voice is very small, which means the kind of person/Instrument has a small influence on the intercept. Different kinds of this combination may have intercept that does not vary too much.

Conclusion for researchers' main hypothesis:
They are all examined by data to be true!
1. Instrument does have the largest influence on the ratings both for Classic and Popular numerically.
2. Harmony I-V-VI is frequently rated as classical and popular, which is actually the only significant level of Harmony compared to Harmony I-IV-V.
3. Both Voicepar3rd and Voicepar5th on average receive significantly lower ratings for Classic than contrary, so vice versa, contrary motion is frequently rated as Classic