**Without Distance=20**

- Distance significant

- No significant effect of musicianship BUT significant effects of music listening (same as pilot)

- MusicianXDistance intx marginal (this was significant in the pilot)

**Chart, line chart

Description automatically generated**

> log.modelA10 <- glm(response ~ distance\*musicianYN + hoursWeekListen + hoursWeekListenJazz, data = master10, family = "binomial")

> summary(log.modelA10)

Call:

glm(formula = response ~ distance \* musicianYN + hoursWeekListen +

hoursWeekListenJazz, family = "binomial", data = master10)

Deviance Residuals:

Min 1Q Median 3Q Max

-1.6930 -1.2185 0.9016 1.0471 1.5680

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) 0.6138941 0.0434330 14.134 <2e-16 \*\*\*

distance -0.1467942 0.0078473 -18.706 <2e-16 \*\*\*

musicianYN 0.0634715 0.0601944 1.054 0.292

hoursWeekListen 0.0069344 0.0008333 8.322 <2e-16 \*\*\*

hoursWeekListenJazz -0.0285006 0.0058267 -4.891 1e-06 \*\*\*

distance:musicianYN 0.0217408 0.0113784 1.911 0.056 .

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 21046 on 15247 degrees of freedom

Residual deviance: 20355 on 15242 degrees of freedom

AIC: 20367

Number of Fisher Scoring iterations: 4

> anova(log.modelC10, log.modelA10, test = "Chisq")

Analysis of Deviance Table

Model 1: response ~ 1

Model 2: response ~ distance \* musicianYN + hoursWeekListen + hoursWeekListenJazz

Resid. Df Resid. Dev Df Deviance Pr(>Chi)

1 15247 21047

2 15242 20355 5 691.17 < 2.2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

**With Distance=20**

- Distance not significant

- Musicianship significant

- Music listening significant

- MusicianXDistance intx marginal

Chart, line chart

Description automatically generated

> log.modelA <- glm(response ~ distance\*musicianYN + hoursWeekListen + hoursWeekListenJazz, data = master, family = "binomial")

> summary(log.modelA)

Call:

glm(formula = response ~ distance \* musicianYN + hoursWeekListen +

hoursWeekListenJazz, family = "binomial", data = master)

Deviance Residuals:

Min 1Q Median 3Q Max

-1.5163 -1.2460 0.9897 1.1004 1.3290

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) 0.0669616 0.0337792 1.982 0.0474 \*

distance -0.0012493 0.0033606 -0.372 0.7101

musicianYN 0.1847672 0.0453388 4.075 4.6e-05 \*\*\*

hoursWeekListen 0.0070301 0.0007629 9.215 < 2e-16 \*\*\*

hoursWeekListenJazz -0.0344654 0.0053230 -6.475 9.5e-11 \*\*\*

distance:musicianYN -0.0084134 0.0049218 -1.709 0.0874 .

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 24472 on 17801 degrees of freedom

Residual deviance: 24356 on 17796 degrees of freedom

AIC: 24368

Number of Fisher Scoring iterations: 4

> anova(log.modelC, log.modelA, test = "Chisq")

Analysis of Deviance Table

Model 1: response ~ 1

Model 2: response ~ distance \* musicianYN + hoursWeekListen + hoursWeekListenJazz

Resid. Df Resid. Dev Df Deviance Pr(>Chi)

1 17801 24472

2 17796 24356 5 115.41 < 2.2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1